Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Slough	Left	0.52	11/09/2018 11/09/2018	Luz Dial

LM Start	0.00	Rating **	Α	Issue No.		4	
LM End	0.00	Issue Type +	Ma	Location *		N/A	
Category	Earthen L	evee		GPS La	atituc	de/Longitude	
Calegory				Start		End	
Item	Operation	nce		0		0	
пеш	Manuals				0		
DWR ID DWR_RD0150_01_s _ 2013_4							
		Comn	nent Cod	de			
		Inspecto	or Comm	nent			
This LMA I	has the up	dated O&M m	anuals f	or their dist	rict.		
	·						

No Photos

LM Start	0.00	Rating **	Α	Issue No.		5	
LM End	0.00	Issue Type +	Ма	Location *		N/A	
Category	evee		GPS La	atitud	le/Longitude		
Calegory				Start		End	
Item		cy Supplies &			0		c
Equipment					0		c
DWR ID	DWR ID DWR_RD0150_01_s _ 2013_5						
		Comp	ant Car	10			

No Photos

Inspector Comment

This LMA has adequate amount of flood fighting materials in a centralized location.

LM Start	0.00	Rating **	Α	Issue No.		6	
LM End	0.00	Issue Type +	Ма	Location *		N/A	
Category Earthen Levee				GPS La	atitud	le/Longitude	
				Start		End	
Item	Flood Pre	paredness &		0		0	
пеш				٥		0	
DWR ID	DWR_RD0	150_01_s _ 201	3_6				
		Comn	nent Cod	le			
	Inspector Comment						
The crew of	The crew of this LMA had flood fighting training from DWR.						

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS : Water Side		C : Corrected	
CR : Crown	M : Minimally Acceptable	A/W : Acceptable but Monitor & Maintain	Ob : Design & System Obsolescence

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Slough	Left	0.52	11/09/2018 11/09/2018	Luz Dial

LM Start	0.00	Rating **	Α	Issue No.	1	
LM End	0.48	Issue Type +	Ма	Location *	LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory			Start End			
Item	Vegetatio	n		38.3326	42°	38.328362°
пеш				-121.5834	71 °	-121.576783°
DWR ID DWR_RD0150_01_f _ 2018_1						·
		Comn	nent Cod	de		

V1 : Control annual grass and weeds on the levee slopes and easements.

Inspector Comment

Annual vegetation is maintained.



View of landside vegetation. Fall 2018

LM Start	0.00	Rating **	Α	Issue No.		2	
LM End	0.48	Issue Type + Ma		Location *		WS	
Category	Earthen Levee					e/Longitude	
Calegory				Start		End	
Item	Vegetatio	n		38.3326	42°	38.328362 °	
пеш				-121.5834	71 °	-121.576783 °	
DWR ID	DWR ID DWR_RD0150_01_f _ 2018_2						

Comment Code

V1: Control annual grass and weeds on the levee slopes and easements.

Inspector Comment

Annual vegetation is maintained.



View of waterside vegetation. Fall 2018

LM Start	0.49	Rating **	M	Issue No.		3			
LM End	0.49	Issue Type +	Ma	Location *		LS			
Category	Catagorii Earthen Levee					GPS Latitude/Longitude			
Calegory				Start		End			
Item	Animal Co	ontrol		38.3282	42°	38.328242	0		
пеш				-121.5765	73 °	-121.576573	0		
DWR ID	DWR_RD0	150_01_f _ 201	8_3						

Comment Code

A3: No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

Backfill rodent holes.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	0.11	Rating **	A/W	Issue No.	46	
LM End	0.14	Issue Type +	Ma	Location *	WS	
Category				GPS La	atitud	le/Longitude
Calegory				Start End		
Item	2017 Stor	m Damage		38.3293	69°	38.329767°
пеш				-121.5749	36°	-121.574589°
DWR ID DWR_RD0150_02_f _ 2017_46						
		Comn	nent Cod	de		

Inspector Comment

Levee Evaluation Comments

Description:The flood damage consists of a waterside erosion approximately 185 feet long on the west (right) bank of the Sacramento River. See attached pages for photos.

Site ID No:286

Site Designation:LMA-112

Repair Type: Erosion Rating:Area of Concern

Field Date:7/17/2017

Notes: Crown is a paved road. Scarps upto 3 ft deep, not fully vertical though. Area of concern because erosion is not very deep into prism.

LM Start	0.11	Rating **	A/W	Issue No.	46 (cont)
LM End	0.14	Issue Type +	Ма	Location *	WS



Photo 2 of 3: LEVAL_FA_2018_286_2138.jpg



Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	0.11	Rating **	A/W	Issue No.		46 (cont)	
LM End	0.14	Issue Type +	Ma	Location *	WS		
Supplemental			GPS Latitude/Longitude				
Calegory	Category			Start		End	
Item	2017 Stor	m Damage		38.3293	69°	38.329767 °	
пеш				-121.5749	-121.574589 °		
DWR ID DWR_RD0150_02_f _ 2017_46							
	Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: The flood damage consists of a waterside erosion approximately 185 feet long on the west (right) bank of the Sacramento River. See attached pages for photos. Site ID No:286

Site Designation:LMA-112 Repair Type: Erosion Rating:Area of Concern

Field Date:7/17/2017

Notes: Crown is a paved road. Scarps upto 3 ft deep, not fully vertical though. Area of concern because erosion is not very deep into prism.



LM Start	0.36	Rating **	М	Issue No.		103			
LM End	0.36	Issue Type +	Ма	Location *	LS				
Category Earthen Levee				GPS La	atitud	e/Longitude			
Calegory	Category					End			
Item	Trim / Thi	n Trees		38.332452°		38.332452 °		38.332452	0
пеш				-121.572378 °		-121.572378	0		
DWR ID	DWR_RD0	150_02_s _ 201	8_103						
		Comn	nent Cod	le					
T1 : Trim t	rees to at I	east five feet	above gi	round level.					
		Inchact	or Comm	ont					

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	0.38	Rating **	М	Issue No.		6	
LM End	0.38	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Slope Sta	bility		38.3325	98°	38.332598°	
пеш				-121.572179 ° -121.572			
DWR ID DWR_RD0150_02_s _ 2012_6							
		Comn	nent Cod	de			
S2 : Repai where pos		slope damag	jed by fo	ot traffic an	d pr	event access	
		Inspecto	or Comm	nent			

LM Start	0.38	Rating **	М	Issue No.	6 (cont)
LM End	0.38	Issue Type +	Ma	Location *	WS



View of slope instability around stairway. Fall 2018

Photo 2 of 2: FA_2018_RD0150_16_6_20180910_00003.jpg



View of slope instability on the waterside of the levee. Fall 2016

LM Start	0.54	Rating **	N	Issue No.		66
LM End	0.54	Issue Type +	Ma	Location *		LS
0.1	Earthen Levee			GPS La	atitud	e/Longitude
Category				Start		End
Item	Trim / Thi	n Trees		38.3343	887°	38.334387°
пеш				-121.5703	355° -121.570355	
DWR ID DWR_RD0150_02_f _ 2016_66						
		Comn	nent Cod	de		
T5 : Tree s	stumps.					
			0			
		Inspecto	or Comm	nent		

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	0.59	Rating **	М	Issue No.		45	
LM End	0.59	Issue Type +	Ma	Location *		WS	
Category	Earthen Levee			GPS Latitude/Longitude			
Calegory				Start		End	
Item	Slope Sta	bility		38.3348	98°	38.334898°	
item				-121.569632 ° -121.56963			
DWR ID DWR_RD0150_02_f _ 2018_45							
	Comment Code						

Comment Code

S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.

Inspector Comment



View of slope damage likely from vehicle traffic. Fall 2018

LM Start	0.71	Rating **	С	Issue No.		10	
LM End	0.71	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS La	tituc	le/Longitude	
Calegory				Start		End	
Item	Encroach	ments		38.33622	28°	38.336228	0
пеш				-121.56833	32°	-121.568332	0
DWR ID DWR_RD0150_02_s _ 2013_10							
	Comment Code						

DE : Debris

Inspector Comment

No Photos

LM Start	0.71	Rating **	М	Issue No.		59
LM End	0.71	Issue Type +	Ma	Location *		LS
Category	Earthen L	evee		GPS La	titud	e/Longitude
Category				Start		End
Item	Encroach	ments		38.33629	91 °	38.336291°
item				-121.56826	60°	-121.568260°
DWR ID	DWR RD0	150 02 s 201	6 59			

Comment Code

TR: Tree or limb

Inspector Comment

Damaged tree roots and trunks appear to damage landside slope of the levee and need to be removed.

Photo 1 of 2 : FA_2018_RD0150_16_59_20180910_00040.jpg



View of the tree trunk on the landside of the levee. Fall 2017

* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence

U: Unacceptable AW: Acceptable but Monitor & Maintain En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	0.71	Rating **	М	Issue No.		59 (cont)
LM End	0.71	Issue Type +	Ма	Location *	LS	
Category	Earthen L	GPS Latitude/Longitude				
Calegory				Start End		
Item	Encroach	ments		38.3362	91 °	38.336291
item				-121.5682	60°	-121.568260
DWR ID DWR_RD0150_02_s _ 2016_59						
Comment Code						

TR: Tree or limb

Inspector Comment

Damaged tree roots and trunks appear to damage landside slope of the levee and need to be removed.

Photo 2 of 2: FA_2018_RD0150_16_59_20180910_00041.jpg



View of the tree limbs and roots on the landside of the levee looking downstream. Fall 2016

							_
LM Start	0.79	Rating **	M	Issue No.		73	
LM End	0.79	Issue Type +	Ma	Location *		LS	
Category Earthen Levee				GPS Latitude/Longitude			
Category				Start		End	
Item	Encroach	ments		38.3373	07°	38.337307	0
пеш				-121.5676	98°	-121.567698	0
DWR ID	DWR RD0	150 02 f 201	7 73				

Comment Code

TR : Tree or limb

Inspector Comment

Landowner needs to remove dead tree from easement.



View of fallen tree on landside levee slope. Fall 2018

LM Start	1.14	Rating **	N	Issue No.		8
LM End	1.14	Issue Type +	Ma	Location *	LS	
Category	evee	GPS Latitude/Longitude				
Category				Start		End
Item	Trim / Thin Trees			38.340864°		38.340864°
item				-121.5629	15°	-121.562915 °
DWR ID	DWR_RD0	150_02_s _ 201	2_8			
Comment Code						
T5 : Tree stumps.						

Inspector Comment



View of a tree stump on the landward slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	1.46	Rating **	С	Issue No.		96
LM End	1.46	Issue Type +	Ma	Location *	WS	
Category Earthen Levee				GPS Latitude/Longitude		
Category	Calegory					End
Item	Animal Control			38.3442	07°	38.344207°
пеш				-121.5590	72°	-121.559072°
DWR ID	DWR_RD0	150_02_s _ 201	8_96			
		Comn	nent Cod	de		
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.						
		Inspecto	or Comm	nent		

No Photos

Issue No. Rating ** 1.80 Μ LM Start 30 2.02 Issue Type + Ма Location * LS LM End Earthen Levee GPS Latitude/Longitude Category Start End Encroachments 38.345937° 38.346786° Item -121.553190° -121.549332° DWR_RD0150_02_f _ 2018_30 DWR ID Comment Code PR: Prunings

No Photos

Inspector Comment

LM Start	1.81	Rating **	С	Issue No.		101	
LM End	1.81	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Vegetatio	n		38.3459	83°	38.345983	0
item				-121.5530	75°	-121.553075	0
DWR ID	DWR_RD0	150_02_s _ 201	8_101				
Comment Code							

No Photos

V2: Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

* Location LS: Land Side WS: Water Side

N/A: Not Applicable

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	2.10	Rating **	М	Issue No.		63
LM End	2.10	Issue Type +	Ma	Location *		LS
Category	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End
Item	ments		38.3470	02°	38.347002 °	
item						-121.547803 °
DWR ID DWR_RD0150_02_f _ 2016_63						
		Comn	nent Cod	de		
TR : Tree	or limb					
		Inspecto	or Comm	nent		



View of a tree trunk on the landside slope of the levee. Spring 2017

LM Start	2.14	Rating **	С	Issue No.		68	
LM End	2.14	Issue Type +	Ma	Location *	LS		
Category Earthen Levee				GPS Latitude/Longitude			
Calegory			Start		End		
Item	Encroachi	Encroachments			83°	38.347083°	
пеш				-121.5470	63°	-121.547063°	
DWR ID	DWR_RD0	150_02_f _ 201	7_68			·	
Comment Code							
PR · Prunings							

'R : Prunings

Inspector Comment

No Photos

LM Start	2.75	Rating **	N	Issue No.	14		
LM End	2.75	Issue Type +	Ма	Location *	LS		
Category	evee	GPS La	atitud	le/Longitude			
Category				Start		End	
Item	Trim / Thi	n Trees		38.3500	41°	38.350041 °	
item	item				53°	-121.536853 °	
DWR ID	DWR_RD0	150_02_s _ 201	2_14				
		Comn	nent Cod	de			
T5 : Tree s	stumps.						
	Inspector Comment						



View of a tree stump on the landward slope.

* Location + Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence N : Not Inspected/Rated LS: Land Side N/A: Not Applicable A : Acceptable M : Minimally Acceptable WS: Water Side C : Corrected A/W : Acceptable but Monitor & Maintain U : Unacceptable En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	3.24	Rating **	М	Issue No.		Issue No.		961
LM End	3.24	Issue Type +	Ма	Location *		Location *		WS
Category Earthen Levee			GPS Latitude/Longitude					
Category				Start		End		
Item	Erosion /	Bank Caving		38.35532	21 °	38.355321		
item				-121.53090)2 °	-121.530902		
DWR ID DWR_RD0150_02_s _ 2012_961								

Comment Code

E2: Schedule repair of erosion site prior to the next inspection.

Inspector Comment

Depressions into the waterward slope can be seen along the waterward slope at this site. Also note the damaged pump support, pump, and pipe just upstream of the site; they may contribute to the erosion in a high water event and should be removed.

LM Start	3.24	Rating **	М	Issue No.	961 (cont)
LM End	3.24	Issue Type +	Ma	Location *	WS



View of the erosion on the waterside of the levee during spring 2015 inspection.

Photo 2 of 5 : FA_2018_RD0150_16_961_20180910_00066.jpg



View of the erosion on the waterside slope of the levee near the pipe looking downstream. This picture was taken during the fall 2013 inspection.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	3.24	Rating **	М	Issue No.	961 (cont)			
LM End	3.24	Issue Type +	Ma	Location *		WS		
Category	Earthen Levee				GPS Latitude/Longitude			
Calegory		Start		End				
Item	Erosion /	Bank Caving		38.3553	21 °	38.355321°		
пеш				-121.5309	02°	-121.530902°		
DWR ID	WR ID DWR_RD0150_02_s _ 2012_961							
Comment Code								

E2: Schedule repair of erosion site prior to the next inspection.

Inspector Comment

Depressions into the waterward slope can be seen along the waterward slope at this site. Also note the damaged pump support, pump, and pipe just upstream of the site; they may contribute to the erosion in a high water event and should be removed.

LM Start	3.24	Rating **	М	Issue No.	961 (cont)
LM End	3.24	Issue Type +	Ma	Location *	WS



View of the erosion on the waterside slope of the levee looking upstream during spring 2013 inspection.

Photo 4 of 5 : FA_2018_RD0150_16_961_20180910_00068.jpg



View of erosion and damaged pipe and abandoned boat on the waterside of the levee looking upstream. This picture was taken during fall 2012 inspection.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	3.24	Rating **	М	Issue No.		Issue No.		Issue No.		961 (cont)
LM End	3.24	Issue Type +	Ма	Location *	ocation * WS					
Catagony	Earthen L	evee	GPS Latitude/Longitude							
Category				Start		End				
Item	Erosion / I	Bank Caving		38.3553	21 °	38.355321 °				
item				-121.5309)2 °	-121.530902°				
DWR ID DWR_RD0150_02_s _ 2012_961										

Comment Code

E2: Schedule repair of erosion site prior to the next inspection.

Inspector Comment

Depressions into the waterward slope can be seen along the waterward slope at this site. Also note the damaged pump support, pump, and pipe just upstream of the site; they may contribute to the erosion in a high water event and should be removed.

Photo 5 of 5: FA_2018_RD0150_16_961_20180910_00069.jpg



View of the erosion site, and broken pump support along with a boat on the waterside of the levee. The picture was taken from the crown looking towards the toe of the levee during fall 2011 inspection.

LM Start	3.30	Rating **	М	Issue No.	17		
LM End	3.30	Issue Type +	Ma	Location *	LS		
Category	Earthen L	evee	GPS Latitude/Longitude				
Category	Start					End	
Item	Vegetation			38.355979°		38.355979°	
Item				-121.53028	88°	-121.530288 °	
DWR ID	DWR_RD0	150_02_s _ 201	2_17				
Comment Code							
V4 : Elderberries are blocking visibility and flood fight capability.							

Inspector Comment

Elderberry is partially blocking visibility.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	3.42	Rating **	A/W	Issue No.	47			
LM End	3.46	Issue Type +	Ma	Location *		WS		
Supplemental				GPS Lat	titud	e/Longitude		
Category				Start		End		
Item	2017 Stor	m Damage	38.35718	3°	38.357631 °			
пеш			-121.528547		7°	-121.527981 °		
DWR ID	ID DWR_RD0150_02_f _ 2017_47							
	Comment Code							

Inspector Comment

Levee Evaluation Comments

Description:The flood damage consists of a waterside erosion approximately 229 feet long on the west (right) bank of the Sacramento River. See attached pages for photos.

Site ID No:287

Site Designation:LMA-113

Repair Type: Erosion

Rating:Serious

Field Date:7/17/2017

Notes: Crown is a paved road. Erosion scarps upto 10 ft deep and within 5 ft of crown. Worse conditions on the DS end. Exposed filter fabric. Serious because of depth of erosion into levee, weak soil, and proximity to crown which is a high traffic public road.

LM Start	3.42	Rating **	A/W	Issue No.	47 (cont)
LM End	3.46	Issue Type +	Ma	Location *	WS



Photo 2 of 3: LEVAL_FA_2018_287_2146.jpg



Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	3.42	Rating **	A/W	Issue No.		47 (cont)		
LM End	3.46	Issue Type +	Ма	Location *		WS		
Category	Suppleme	ental		GPS Latitude/Longitude				
Calegory				Start		End		
Item	2017 Stor	m Damage		38.35718	38.357631 °			
пеш				-121.52854	47 °	-121.527981 °		
DWR ID	D DWR_RD0150_02_f _ 2017_47							
	Comment Code							

Inspector Comment

Levee Evaluation Comments

Description: The flood damage consists of a waterside erosion approximately 229 feet long on the west (right) bank of the Sacramento River. See attached pages for photos.

Site ID No:287

Site Designation:LMA-113 Repair Type: Erosion

Rating:Serious Field Date:7/17/2017

Notes: Crown is a paved road. Erosion scarps upto 10 ft deep and within 5 ft of crown. Worse conditions on the DS end. Exposed filter fabric. Serious because of depth of erosion into levee, weak soil, and proximity to crown which is a high traffic public road.



LM Start	4.50	Rating **	U	Issue No.		44	
LM End	4.57	Issue Type +	Ma	Location *		WS	
Category	Suppleme	ental		GPS Lat	atitud	e/Longitude	
Category				Start		End	
Item		CE Erosion S	Survey,	38.3709	28°	38.371909	0
пеш	DRAFT			-121.5230	69°	-121.523316	0
DWR ID	DWR_RD0	150_02_f _ 201	8_44				
		Comn	nent Cod	de			

Inspector Comment

2017 Site ID: SAC 38.5 R

Status: Critical

2017 Field Notes: New erosion pocket. Vertical section along lower

bank, and cracking. Upgraded to critical.

Site History: 1999 - Downstream end (300 ft) repaired with rock. 2010 -Toe erosion, some vertical slopes lower down. 2011 - Failing rock repair. Slumping of the lower bank. Minor new erosion. 2013 - Tree at upstream end has exposed roots. Some new

erosion.

Fall 2018 DWR Inspection: Erosion along lower bank and cracking not visible from levee crown due to vegetation.



View of waterside slope. Fall 2018

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Page 13 of 22

Flood Control Project Maintenance Levee Inspections

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	4.50	Rating **	U	Issue No.	44 (cont)		
LM End	4.57	Issue Type +	Ma	Location *	WS		
Category	Suppleme	ental		GPS Latitude/Longitude			
Calegory				Start		End	
Item		CE Erosion S	Survey,	38.3709	28°	38.371909 °	
пеш	DRAFT			-121.5230	-121.523316 °		
DWR ID DWR_RD0150_02_f _ 2018_44							
		Comn	nent Coo	de			

Inspector Comment

2017 Site ID: SAC 38.5 R

Status: Critical

2017 Field Notes: New erosion pocket. Vertical section along lower

bank, and cracking. Upgraded to critical.

Site History: 1999 - Downstream end (300 ft) repaired with rock. 2010 - Toe erosion, some vertical slopes lower down. 2011 - Failing rock repair. Slumping of the lower bank. Minor new erosion. 2013 - Tree at upstream end has exposed roots. Some new

erosion.

Fall 2018 DWR Inspection: Erosion along lower bank and cracking not visible from levee crown due to vegetation.



View of waterside slope. Fall 2018

LM Start	4.59	Rating **	С	Issue No.		93
LM End	4.59	Issue Type +	Ma	Location *		LS
Category	Earthen L	evee	GPS La	atitud	e/Longitude	
Calegory				Start		End
Item	Vegetatio	n		38.3721	60°	38.372160°
пеш				-121.5237	01 °	-121.523701 °
DWR ID DWR_RD0150_02_s _ 2018_93						
		Comn	nent Coc	le .		

V2 : Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	4.69	Rating **	М	Issue No.		28				
LM End	4.69	Issue Type +	Ma	Location *		WS				
Category	Earthen Levee					e/Longitude				
Calegory				Start		End				
Item	Vegetatio	n		38.3734	85°	38.373485 °				
пеш				-121.5239	63°	-121.523963 °				
DWR ID DWR_RD0150_02_s _ 2012_28										
		Comn	nent Cod	de						
V2 : Remo	ve the wild	d growth other	than na	tive grasse	s fro	m the levee				
		Inspecto	or Comm	nent						



Century plant on waterward slope

LM Start	4.86	Rating **	С	Issue No.	90			
LM End	4.89	Issue Type +	Ma	Location *	LS			
Category Earthen Levee				GPS Latitude/Longitude				
Calegory	Category					End		
Item	Vegetatio	n		38.375740°		38.376181 °		
пеш				-121.5252	74°	-121.525431 °		
DWR ID DWR_RD0150_02_s _ 2018_90								
Comment Code								

V2 : Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	5.04	Rating **	A/W	Issue No.	50		
LM End	5.12	Issue Type +	Ma	Location *	WS		
Category				GPS Latitude/Longitude			
Calegory	egory				Start		
Item	2017 Stor	m Damage		38.3783	11 °	38.379458	0
пеш				-121.5253	17°	-121.524931	0
DWR ID DWR_RD0150_02_f _ 2017_50							
Comment Code							

Inspector Comment

Levee Evaluation Comments

Description:The flood damage consists of a waterside erosion approximately 447 feet long on the west (right) bank of the Sacramento River. See attached pages for photos.

Site ID No:288

Site Designation:LMA-114

Repair Type: Erosion Rating:Area of Concern

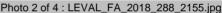
Field Date:7/17/2017

Notes: Crown is a paved road. Much of site was not accessible because of thorny veg. Scarps were only about 1 ft deep where it was accessible so rated it a lower priority. Irrigation pipe within the site. A boat view would be helpful here. Fall 2018 DWR Inspector: Erosion along bank not visible from levee crown.

LM Start	5.04	Rating **	A/W	Issue No.	50 (cont)
LM End	5.12	Issue Type +	Ma	Location *	WS



View of waterside slope with some revetment. Fall 2018





Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	5.04	Rating **	A/W	Issue No. 50 (cont)			_		
LM End	5.12	Issue Type +	Ma	Location *	WS				
Category	Supplemental				GPS Latitude/Longitude				
Calegory				Start		End			
Item	2017 Stor	m Damage		38.3783	11 °	38.379458	0		
пеш				-121.5253	17°	-121.524931	0		
DWR ID	DWR_RD0150_02_f _ 2017_50								
Comment Code									

Inspector Comment

Levee Evaluation Comments

Description: The flood damage consists of a waterside erosion approximately 447 feet long on the west (right) bank of the Sacramento River. See attached pages for photos.

Site ID No:288

Site Designation:LMA-114

Repair Type: Erosion Rating:Area of Concern

Field Date:7/17/2017

Notes: Crown is a paved road. Much of site was not accessible because of thorny veg. Scarps were only about 1 ft deep where it was accessible so rated it a lower priority. Irrigation pipe within the site. A boat view would be helpful here. Fall 2018 DWR Inspector: Erosion along bank not visible from levee crown.

LM Start	5.04	Rating **	A/W	Issue No.	50 (cont)
LM End	5.12	Issue Type +	Ma	Location *	WS



Photo 4 of 4: LEVAL_FA_2018_288_2157.jpg



: Acceptable Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	5.20	Rating **	С	Issue No.	89		
LM End	5.20	Issue Type +	Ма	Location *	LS		
Category	evee	GPS Latitude/Longitude					
Calegory				Start		End	
Item	Vegetatio	n		38.380544°		38.380544°	
пеш				-121.52458	87°	-121.524587 °	
DWR ID	DWR_RD0	150_02_s _ 201	8_89				
Comment Code							
V2 : Remo	V2 : Remove the wild growth other than native grasses from the levee						

slopes.

Inspector Comment

Photo 1 of 2: FA_2018_RD0150_16_975_20180910_00070.jpg

No Photos



View of minor slope instability on the waterside slope of the levee looking downstream during fall 2013 inspection.

LM Start	5.24	Rating **	М	Issue No.	975			
LM End	5.24	Issue Type +	Ma	Location *	WS			
Category Earthen Levee				GPS Latitude/Longitude				
Calegory			Start		End			
Item	Slope Sta	bility		38.381126°		38.381126°		
пеш				-121.5242	07°	-121.524207°		
DWR ID DWR_RD0150_02_s _ 2013_975								
Comment Code								

S1: Repair slope instability.

Inspector Comment

Depression on the waterward slope at the shoulder over an irrigation pipe.

LM Start	5.24	Rating **	М	Issue No.	975 (cont)
LM End	5.24	Issue Type +	Ma	Location *	WS

Photo 2 of 2: FA_2018_RD0150_16_975_20180910_00071.jpg



View of a minor depression along the landward slope of the levee over a pipe penetration looking downstream.

Location + Issue Type Ma: Maintenance Deficiancy LS: Land Side N/A: Not Applicable : Acceptable : Minimally Acceptable N: Not Inspected/Rated WS: Water Side C : Corrected Ob : Design & System Obsolescence A/W : Acceptable but Monitor & Maintain U : Unacceptable En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	5.27	Rating **	С	Issue No.		87			
LM End	5.27	Issue Type +	Ma	Location *		LS			
Category	Earthen L	evee		GPS La	atitud	de/Longitude			
Category				Start		End			
Item	Vegetatio	n	38.3815	24°	38.381524	0			
пеш					83°	-121.523883	0		
DWR ID	DWR_RD0	150_02_s _ 201	8_87						
Comment Code									
1/2 . Dama	1/2 . Damaya tha wild growth ather than native groups from the layer								

V2 : Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

No Photos

LM End 5.29 Issue Type + Ma Location	on * WS
LIVI ETIG 3:29	VV 5
Category Earthen Levee GF	PS Latitude/Longitude
	tart End
Slope Stability 38.	381660 ° 38.381660 °
	523726 ° -121.523726 °
DWR ID DWR_RD0150_02_s _ 2018_109	

Comment Code

S2 : Repair the levee slope damaged by foot traffic and prevent access where possible.

Inspector Comment

No Photos

LM Start	5.33	Rating **	М	Issue No.		54	
LM End	5.33	Issue Type +	Ma	Location *	WS		
Category	Earthen L	evee		GPS La	titud	le/Longitude	
Calegory				Start		End	
Item	Slope Stability			38.3820	72 °	38.382072°	
item				-121.5232	20°	-121.523220°	
DWR ID	DWR_RD0	150_02_f _ 201	4_54				
Comment Code							

S2 : Repair the levee slope damaged by foot traffic and prevent access where possible.

Inspector Comment



View of slope instability on the waterside of the levee looking towards the toe. Fall 2014

* Location

LS: Land Side N/A: Not Applicable

WS: Water Side

** Rating
A : Acceptable

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma: Maintenance Deficiancy

Ob: Design & System Obsolescence
En: Enforcement

A/W : Acceptable but Monitor & Maintain

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	5.90	Rating **	М	Issue No.		52		
LIVI Start	3.90							
LM End	5.90	Issue Type +	Ма	Location *	cation * LS			
Category	Earthen Levee			GPS La	atitud	le/Longitude		
Category				Start		End		
Item	Erosion / I	Bank Caving		38.3879	15°	38.387915 °		
пеш				-121.516002 °		-121.516002°		
DWR ID	DWR_RD0							
		Comn	nent Cod	de				
E2 : Sched	dule repair	of erosion site	e prior to	the next in	spe	ction.		
		Inspecto	or Comm	nent				
Repair ero	sion due to	runoff.						
-								

LM Start	5.90	Rating **	М	Issue No.	52 (cont)
LM End	5.90	Issue Type +	Ma	Location *	LS



View of erosion due to runoff. Fall 2018

Photo 2 of 2: FA_2018_RD0150_16_52_20180910_00031.jpg



View of the erosion on the landside of the levee during spring 2017 inspection.

LM Start	6.73 Rating ** M			Issue No.		111	
LM End	6.73	Issue Type +	Ma	Location *	WS		
Category	Earthen L	evee		GPS La	titud	e/Longitude	
Category				Start		End	
Item	Animal Co	ontrol	38.3998	38°	38.399838 °		
пеш			-121.5148	98°	-121.514898 °		
DWR ID	DWR_RD0	8_111					
	Comment Code						

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

Possible rodent hole or sinkhole forming on waterside shoulder needs to be repaired.

Photo 1 of 1: FA_2018_RD0150_16_111_20180910_00063.jpg



View of possible animal hole on waterside looking east. Spring 2018

* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiancy

M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence

U: Unacceptable AW: Acceptable but Monitor & Maintain En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

		D-4: **		Innua Na				
LM Start	7.06	Rating **	М	Issue No.		71		
LM End	7.06 Issue Type + Ma			Location *		LS		
Category	Earthen Levee			GPS La	atitud	le/Longitude		
Category				Start		End		
Item	Trim / Thi	n Trees	38.4043	38°	38.404338°			
Rem				-121.5166	25°	-121.516625°		
DWR ID	DWR_RD0	150_02_s _ 201	8_71					
		Comn	nent Cod	de				
T1: Trim t	rees to at I	east five feet	above g	round level.				
	Inspector Comment							

No Photos

	LM Start	7.17	Rating **	A/W	Issue No.		53	
	LM End	7.23	Issue Type +	Ма	Location *		WS	
	Category	Suppleme	ental		GPS La	atitud	e/Longitude	
					Start		End	
	14	2017 Storm Damage			38.405933°		38.406722	0
	Item				-121.517197°		-121.517617	0
	DWR ID	DWR_RD0	150_02_f _ 201	7_53				
	Comment Code							

Inspector Comment

Levee Evaluation Comments

Description:The flood damage consists of a waterside erosion approximately 311 feet long on the west (right) bank of the Sacramento River. See attached pages for photos.

Site ID No:289

Site Designation:LMA-115

Repair Type: Erosion Rating:Area of Concern

Field Date:7/17/2017

Notes: Crown is a paved road. 2 scarps 6 ft deep and about 15 ft long each within site and 6 ft from crown, otherwise erosion was pretty small. Rip rap on 3/4 of slope here, but not full coverage. Area of concern because deeper scarps only extended a short distance.



View of waterside slope with some revetment. Fall 2018

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	7.17 Rating ** A/W			Issue No.		53 (cont)	
LM End	7.23	Issue Type +	Ма	Location *	Location * WS		
Category	Suppleme	ental		GPS La	tituc	le/Longitude	
Calegory				Start		End	
Item	2017 Stor	m Damage		38.40593	33 °	38.406722	0
пеш		-121.51719	97°	-121.517617	0		
DWR ID	DWR_RD0	150_02_f _ 201	7_53				
	Comment Code						

Inspector Comment

Levee Evaluation Comments

Description:The flood damage consists of a waterside erosion approximately 311 feet long on the west (right) bank of the Sacramento River. See attached pages for photos.

Site ID No:289

Site Designation:LMA-115

Repair Type: Erosion Rating:Area of Concern

Field Date:7/17/2017

Notes: Crown is a paved road. 2 scarps 6 ft deep and about 15 ft long each within site and 6 ft from crown, otherwise erosion was pretty small. Rip rap on 3/4 of slope here, but not full coverage. Area of concern because deeper scarps only extended a short distance.

LM Start	7.17	Rating **	A/W	Issue No.	53 (cont)
LM End	7.23	Issue Type +	Ma	Location *	WS



Photo 3 of 4: LEVAL_FA_2018_289_2165.jpg



Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	7.17	Rating **	A/W	Issue No.		53 (cont)
LM End	7.23	Issue Type +	Ma	Location *		WS
Category Supplemental			GPS Latitude/Longitude			
Calegory				Start		End
Item	2017 Stor	2017 Storm Damage			33 °	38.406722°
пеш			-121.517197°		-121.517617°	
DWR ID	DWR_RD0150_02_f _ 2017_53					
		Comn	nent Coc	le		

Inspector Comment

Levee Evaluation Comments

Description: The flood damage consists of a waterside erosion approximately 311 feet long on the west (right) bank of the Sacramento River. See attached pages for photos.

Site ID No:289

Site Designation:LMA-115

Repair Type: Erosion Rating:Area of Concern

Field Date:7/17/2017

Notes: Crown is a paved road. 2 scarps 6 ft deep and about 15 ft long each within site and 6 ft from crown, otherwise erosion was pretty small. Rip rap on 3/4 of slope here, but not full coverage. Area of concern because deeper scarps only extended a short distance.



LM Start	7.22	Rating **	М	Issue No.		32	
LM End	7.22	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
ltom	Vegetatio	n		38.4064	54°	38.406454	0
Item				-121.5177	32°	-121.517732	0
DWR ID	DWR_RD0	150_02_s _ 201	2_32				
Comment Code							

V4: Elderberries are blocking visibility and flood fight capability.

Inspector Comment

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	0.01	Rating **	A/W	Issue No.		22
LM End	7.80	Issue Type +	Ма	Location *	WS	
Supplemental			GPS Latitude/Longitude			
Calegory				Start		End
Item		CE Erosion S	Survey,	38.33273	35 °	38.406923 °
пеш	DRAFT			-121.58362	25 °	-121.542640 °
DWR ID	DWR_RD0150_03_f _ 2018_22					
	Comment Code					

No Photos

Inspector Comment

2017 Site ID: ELK 0.2 L Status: Eroding

.

2017 Field Notes: Fresh erosion; site continues to worsen.

D-41-- **

Site History: 1997 - Most of lower Elk Slough contains high near vertical banks, with erosion into the levee slope. Channel almost appears incised. 2002 - Sites where the levee slope is near vertical and severely eroding. It could fail catastrophically. 2004 - Looks bad in terms of vertical slopes and fallen trees. 2005 - Banks are still over steepened in most places and potentially susceptible to geotechnical failures. 2006 - Both banks are still over steepened in most places and potentially susceptible to geotechnical failures. 2010 - The entire reach is in poor condition, with severely eroding near vertical slopes, needs a regional repair. 2011 - Channel banks are still oversteepened with erosion continuing. 2012 - New cracks and animal holes observed.

LM Start	0.11	Rating ""	C	issue ino.		43	
LM End	0.20	Issue Type +	Ma	Location *	CR		
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory			Start		End		
Item	Vegetatio	n		38.3342	20°	38.335449°	
item				-121.583381 °		-121.582863°	
DWR ID	DWR_RD0	150_03_s _ 201	8_43				
		Comn	nent Cod	de			
V9 : Keep	V9 : Keep the crown roadway free of vegetation.						
		Inspecto	or Comm	nent			

Innue Nin

No Photos

* Location

LS: Land Side N/A: Not
WS: Water Side

N/A: Not Applicable

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiancy

Ob : Design & System Obsolescence
En : Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	0.11	Rating **	М	Issue No.		936	
LM End	0.11	Issue Type +	Ma	Location *		WS	
Category Earthen Levee			GPS Latitude/Longitude				
Calegory				Start		End	
Item	Vegetatio	n	38.3342	33°	38.334233 °		
пеш			-121.5834	14°	-121.583414°		
DWR ID	DWR_RD0	150_03_s _ 201	2_936				
	Comment Code						
V4 : Elderb	V4 : Elderberries are blocking visibility and flood fight capability.						

Inspector Comment

Elderberries are partially blocking visibility.

Issue No. Rating ** С 0.81 LM Start 44 0.83 Issue Type + Ма Location * CR LM End Earthen Levee GPS Latitude/Longitude Category Start End Crown Surface / Depressions / 38.343925° 38.344189° Item Rutting -121.580297° -121.580231 ° DWR_RD0150_03_s _ 2018_44 DWR ID Comment Code

C1 : Add appropriate material and re-grade the levee to bring the crown above the design elevation.

Inspector Comment

No Photos

No Photos

LM Start	0.92	Rating **	M	Issue No.		5	
LM End	0.92	Issue Type +	Ma	Location *	LS		
Category	Earthen L	evee		GPS La	titud	e/Longitude	
Calegory				Start		End	
Item	Vegetatio	n		38.34549	93°	38.345493	0
пеш				-121.57968	32°	-121.579682	0
DWR ID	DWR_RD0	150_03_s _ 201	2_5				

Comment Code
V4 : Elderberries are blocking visibility and flood fight capability.

Inspector Comment

Maintain visibility of levee slopes.

No Photos

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	1.42	Rating **	С	Issue No.		33	
LM End	1.44	Issue Type +	Ma	Location *		WS	
Supplemental				GPS Latitude/Longitude			
Calegory				Start		End	
Item	2017 Stor	m Damage		38.3481	42 °	38.348411	0
item				-121.5723 ⁻	19°	-121.572339	0
DWR ID	DWR_RD0	150_03_f _ 201	7_33				

No Photos

Inspector Comment

Comment Code

Levee Evaluation Comments

Description:Instability, cracking, and erosion were observed on the waterside levee slope on the east (left) bank of Elk Slough. The site is approximately 98 feet long. See attached pages for photos. Site ID No:293

Site Designation:LMA-119

Repair Type: Erosion

Rating:Critical

Field Date:7/19/2017

Notes: Site is serious because lower 2/3 of slope is near vertical and site is located on a bend. Fall 2018 DWR Inspector: LMA repaired slope.

-						
LM Start	1.54	Rating **	С	Issue No.	77	
LM End	1.54	Issue Type +	Ma	Location *		CR
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Crown Su	ssions /	38.3498	08°	38.349808°	
пеш	Rutting			-121.572641 °		-121.572641 °
DWR ID	DWR_RD0	150_03_s _ 201	8_77	'		·
		Comn	nent Cod	de		
C2 : Repa	ir depressi	ons or ruts in	the crow	n or slope.		
Inspector Comment						

No Photos

LS : Land Side N/A: Not Applicable WS: Water Side

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	1.83	Rating **	М	Issue No.		85	
LM End	1.83	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Encroach	ments		38.3537	61 °	38.353761 °	
item				-121.5723	90°	-121.572390°	
DWR ID	DWR_RD0	150_03_s _ 201	6_85				
		Comn	nent Cod	de			
TR : Tree	or limb						
			_				
Inspector Comment							



View of broken tree trunk on the waterside slope of the levee.

LM Start	2.29	Rating **	A/W	Issue No.	ue No.		
LM End	2.30	Issue Type +	Ma	Location *		WS	
Category	ental	GPS Latitude/Longitude					
Calegory			Start		End		
Item	2017 Stor	m Damage		38.3541	03°	38.354211°	
пеш				-121.5648	50°	-121.564631 °	
DWR ID DWR_RD0150_03_f _ 2017_37							
	Comment Code						

Inspector Comment

Levee Evaluation Comments

Description:Instability, cracking, and erosion were observed on the waterside levee slope on the east (left) bank of Elk Slough. The site is approximately 75 feet long. See attached pages for photos. Site ID No:294

Site Designation:LMA-120 Repair Type: Erosion

Rating:Area of Concern Field Date:7/19/2017

Notes: Area of concern because erosion is not too far into the levee prism and looks similar to the rest of the levee outside of the site. Crown is a paved road.



View of slope damage near fallen tree. Fall 2018

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	2.29	Rating **	A/W	Issue No. 37		37 (cont)		
LM End	2.30	Issue Type +	Ma	Location *	ion * WS			
Category	Supplemental				GPS Latitude/Longitude			
Calegory			Start		End			
Item	2017 Stor	m Damage		38.35410)3 °	38.354211 °		
пеш				-121.5648	50°	-121.564631 °		
DWR ID	DWR ID DWR_RD0150_03_f _ 2017_37							
	Comment Code							

Inspector Comment

Levee Evaluation Comments

Description:Instability, cracking, and erosion were observed on the waterside levee slope on the east (left) bank of Elk Slough. The site is approximately 75 feet long. See attached pages for photos. Site ID No:294

Site Designation:LMA-120 Repair Type: Erosion Rating:Area of Concern

Field Date:7/19/2017

Notes: Area of concern because erosion is not too far into the levee prism and looks similar to the rest of the levee outside of the site. Crown is a paved road.

LM Start	2.29	Rating **	A/W	Issue No.	37 (cont)
LM End	2.30	Issue Type +	Ma	Location *	WS



Photo 3 of 4: LEVAL_FA_2018_294_2275.jpg



N : Not Inspected/Rated C : Corrected

+ Issue Type Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	2.29	Rating **	A/W	Issue No. 37 (cd		37 (cont)	
LM End	2.30	Issue Type +	Ма	Location *	WS		
Category	GPS La	tituc	le/Longitude				
Category			Start End				
Item	2017 Stor	m Damage		38.35410)3 °	38.354211	0
пеш				-121.56485	50°	-121.564631	0
DWR ID DWR_RD0150_03_f _ 2017_37							
	Comment Code						

Inspector Comment

Levee Evaluation Comments

Description:Instability, cracking, and erosion were observed on the waterside levee slope on the east (left) bank of Elk Slough. The site is approximately 75 feet long. See attached pages for photos. Site ID No:294

Site Designation:LMA-120

Repair Type: Erosion Rating:Area of Concern

Field Date:7/19/2017

Notes: Area of concern because erosion is not too far into the levee prism and looks similar to the rest of the levee outside of the site. Crown is a paved road.



LM Start	2.31	Rating **	С	Issue No.	78		
LM End	2.31	Issue Type +	Ma	Location *	LS		
Category Earthen Levee			GPS Latitude/Longitude				
Category				Start		End	
Item	Trim / Thi	n Trees		38.35428	6°	38.354286	0
item		-121.56449	4 °	-121.564494	0		
DWR ID DWR_RD0150_03_s _ 2012_78							
Comment Code							

T2: Thin trees to allow visibility of the ground and room to flood fight.

Inspector Comment

New tree was planted on the landside slope. Remove trees smaller than 4-inches in diameter at chest height.

No Photos

N : Not Inspected/Rated

C : Corrected

+ Issue Type

Ma : Maintenance Deficiancy Ob : Design & System Obsolescence

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	2.51	Rating **	С	Issue No.		38	
LM End	2.52	Issue Type +	Ма	Location *		WS	
Category	Supplemental				GPS Latitude/Longitude		
Calegory				Start		End	
Item	2017 Stor	m Damage		38.35623	1 °	38.356422°	
пеш				-121.56191	7 °	-121.561783°	
DWR ID	DWR_RD0	150_03_f _ 201	7_38			·	

No Photos

Inspector Comment

Comment Code

Levee Evaluation Comments

Description:On 11 and 15 January 2017, waterside instability and cracking were observed on the east (left) bank of Elk Slough. The site is approximately 80 feet long and 5 to 10 feet down from the levee crest. See attached pages for photos.

Site ID No:296

Site Designation:LMA-122

Repair Type: Stability

Rating:Critical

Field Date:7/19/2017

Notes: Crown is a paved road. Serious because erosion cuts into levee prism significantly (lower 2/3 - 1/2 is near vertical) and longitudinal cracking observed above erosion, but damage does not extend into crown. Fall 2018 DWR Inspector: LMA repaired erosion and cracking damage to slope.

LM Start	2.52	Rating **	С	Issue No.		54		
LM End	2.52	Issue Type +	Ma	Location *		WS		
Category	evee	GPS La	atitud	e/Longitude				
Calegory				Start End				
Item	Erosion /	Bank Caving		38.356398°		38.356398°		
item				-121.5618	34°	-121.561834°		
DWR ID	R ID DWR_RD0150_03_s _ 2017_54							
Comment Code								
E0 0.1.	EQ. Only did a margin of a margin of the minute the annual increasing							

E2: Schedule repair of erosion site prior to the next inspection.

Inspector Comment

LMA repaired erosion damage.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	2.72	Rating **	A/W	Issue No.	42		
LM End	2.73	Issue Type +	Ма	Location *	WS		
Category	Supplemental				tituc	le/Longitude	
Category				Start End			
Item	2017 Stor	m Damage		38.35925	6 °	38.359461	0
пеш				-121.56123	9°	-121.561275	0
DWR ID	DWR_RD0	00150_03_f _ 2017_42					
		Comn	nent Coc	le			

Inspector Comment

Levee Evaluation Comments

Description:On 11 and 15 January 2017, waterside instability and cracking were observed on the east (left) bank of Elk Slough. The site is approximately 75 feet long and 5 to 10 feet down from the levee crest. See attached pages for photos

Site ID No:297

Site Designation:LMA-123

Repair Type: Stability Rating:Area of Concern

Field Date:7/18/2017

Notes: Crown is a paved road. 20 ft of cracking observed maximum within the site, but lower 1/4 of slope is near vertical. Lower priority because it is not too much worse than the surounding levees.

LM Start	2.72	Rating **	A/W	Issue No.	42 (cont)
LM End	2.73	Issue Type +	Ma	Location *	WS



Photo 2 of 3: LEVAL_FA_2018_297_1931.jpg



Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	2.72	Rating **	A/W	Issue No.	42 (cont)			
LM End	2.73	Issue Type +	Ma	Location *	WS			
Category	ental	GPS Lat	ituc	le/Longitude				
Calegory						End		
Item	2017 Stor	m Damage		38.35925	6°	38.359461 °		
пеш				-121.56123	9°	-121.561275 °		
DWR ID	DWR_RD0	D0150_03_f _ 2017_42						
	Comment Code							

Inspector Comment

Levee Evaluation Comments

Description:On 11 and 15 January 2017, waterside instability and cracking were observed on the east (left) bank of Elk Slough. The site is approximately 75 feet long and 5 to 10 feet down from the levee crest. See attached pages for photos

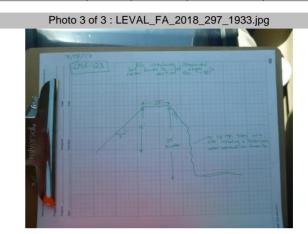
Site ID No:297

Site Designation:LMA-123

Repair Type: Stability Rating: Area of Concern

Field Date:7/18/2017

Notes: Crown is a paved road. 20 ft of cracking observed maximum within the site, but lower 1/4 of slope is near vertical. Lower priority because it is not too much worse than the surounding levees.



LM Start	2.74	Rating **	A/W	Issue No.		45
LM End	2.76	Issue Type +	Ma	Location *		WS
Category	Supplemental			GPS La	atitud	e/Longitude
Calegory				Start		End
Item	2017 Stor	m Damage		38.3595	94°	38.359808°
пеш				-121.5613	08°	-121.561369°
DWR ID	DWR_RD0	150_03_f _ 201	7_45			

Comment Code

Inspector Comment

Levee Evaluation Comments

Description:On 11 and 15 January 2017, waterside instability and cracking were observed on the east (left) bank of Elk Slough. The site is approximately 80 feet long and 5 to 10 feet down from the levee crest. See attached pages for photos.

Site ID No:298

Site Designation:LMA-124

Repair Type: Stability Rating: Area of Concern

Field Date:7/18/2017

Notes: No cracking observed, but there is runoff erosion along the entire WS slope here. Crown is a paved road. Area of concern because erosion was caused by runoff and was less severe than other sites along Elk Slough.



LS: Land Side N/A: Not Applicable

WS: Water Side

Acceptable Minimally Acceptable

U : Unacceptable

N: Not Inspected/Rated

C : Corrected

+ Issue Type

Ma: Maintenance Deficiancy Ob : Design & System Obsolescence

A/W : Acceptable but Monitor & Maintain En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	2.74	Rating **	A/W	Issue No.	45 (cont)			
LM End	2.76	Issue Type +	Ма	Location *		WS		
Category	ental	GPS Latitude/Longitude						
Calegory		Start						
Item	2017 Stor	m Damage		38.3595	94°	38.359808°		
пеш				-121.5613	08°	-121.561369°		
DWR ID	D DWR_RD0150_03_f _ 2017_45							
	Comment Code							

Inspector Comment

Levee Evaluation Comments

Description:On 11 and 15 January 2017, waterside instability and cracking were observed on the east (left) bank of Elk Slough. The site is approximately 80 feet long and 5 to 10 feet down from the levee crest. See attached pages for photos.

Site ID No:298

Site Designation:LMA-124

Repair Type: Stability

Rating:Area of Concern Field Date:7/18/2017

Notes: No cracking observed, but there is runoff erosion along the entire WS slope here. Crown is a paved road. Area of concern because erosion was caused by runoff and was less severe than other sites along Elk Slough.

LM Start	2.74	Rating **	A/W	Issue No.	45 (cont)
LM End	2.76	Issue Type +	Ma	Location *	WS



Photo 3 of 3: LEVAL_FA_2018_298_1926.jpg



Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

		D // ++			I	
LM Start	2.75	Rating **	A/W	Issue No.		62
LM End	2.75	Issue Type +	Ma	Location *		WS
Category	Earthen L	evee		GPS L	atitud	e/Longitude
Calegory				Start		End
Item	Slope Sta	bility		38.3596	93°	38.359693 °
item				-121.5613	854°	-121.561354°
DWR ID	DWR_RD0	150_03_s _ 201	7_62			
		Comn	nent Cod	de		
S1 : Repai	ir slope ins	tability.				
		Inspecto	or Comm	nent		
Run-off due to rain.						



View of slope instability on the waterside slope of the levee looking downstream. Spring 2017

LM Start	2.80	Rating **	A/W	Issue No.		53	
LM End	2.81	Issue Type +	Ma	Location *	WS		
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
ltem 2017 Storm Damage			38.3603	67°	38.360544°		
item				-121.5615	92 °	-121.561683°	
DWR ID DWR_RD0150_03_f _ 2017_53							
Commont Codo							

Inspector Comment

Levee Evaluation Comments

Description:On 11 January 2017, waterside instability and cracking were observed on the east (left) bank of Elk Slough. The site is approximately 70 feet long and 12 feet down from the levee crest. See attached pages for photos

Site ID No:299

Site Designation:LMA-125 Repair Type: Stability Rating: Area of Concern

Field Date:7/18/2017 Notes: Crown is a paved road. Cracking on upper 1/3 of slope. Lower 1/2 of slope is near vertical. Area of concern because erosion is less severe than other sites along Elk Slough.



LS: Land Side WS: Water Side

N/A: Not Applicable

Acceptable Minimally Acceptable U : Unacceptable

N: Not Inspected/Rated C : Corrected

A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	2.80	Rating **	A/W	Issue No.	53 (cont)		
LM End	2.81	Issue Type +	Ма	Location *	WS		
Category				GPS Latitude/Longitude			
Calegory				Start		End	
2017 Storm Damage			38.360367°		38.360544°		
пеш				-121.561592 °		-121.561683°	
DWR ID DWR_RD0150_03_f _ 2017_53							
Comment Code							

Inspector Comment

Levee Evaluation Comments

Description:On 11 January 2017, waterside instability and cracking were observed on the east (left) bank of Elk Slough. The site is approximately 70 feet long and 12 feet down from the levee crest. See attached pages for photos

Site ID No:299

Site Designation:LMA-125

Repair Type: Stability Rating:Area of Concern

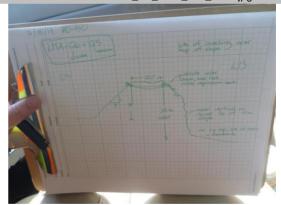
Field Date:7/18/2017

Notes: Crown is a paved road. Cracking on upper 1/3 of slope. Lower 1/2 of slope is near vertical. Area of concern because erosion is less severe than other sites along Elk Slough.

LM Start	2.80	Rating **	A/W	Issue No.	53 (cont)
LM End	2.81	Issue Type +	Ma	Location *	WS



Photo 3 of 3: LEVAL_FA_2018_299_2108.jpg



Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	2.80	Rating **	С	Issue No.	79		
LM End	2.80	Issue Type +	Ма	Location *			
Category			GPS Latitude/Longitude				
Calegory	ıy			Start		End	
Item	2017 Storm Damage			38.36037	'2 °	38.360397°	
пеш			-121.56159)4 °	-121.561606°		
DWR ID	DWR_RD0150_03_f _ 2017_79						
Comment Code							

No Photos

Inspector Comment

Levee Evaluation Comments

Description:On 7 February 2017, a sinkhole 3 feet wide by 3 feet deep was observed at the levee crest. See attached pages for photos. Site ID No:300

Site Designation:LMA-126 Repair Type: Stability Rating:Area of Concern Field Date:7/18/2017

Notes: Sinkhole os present on both sides of crown and crown has a dip of about 1 ft on the WS half. Crown is a paved road here. Sink hole appears to be caused by a rodent hole so it was rated lower priority because it is a general maintenance issue. See LMA-125 for cross section.

LM Start	2.80	Rating **	A/W	Issue No.		35
LM End	2.80	Issue Type +	Ma	Location *	WS	
Category Earthen Levee				GPS La	atitud	le/Longitude
				Start		End
Item	Erosion /	Bank Caving		38.3604	32°	38.360432 °
пеш				-121.5616	44 °	-121.561644°
DWR ID DWR_RD0150_03_s _ 2013_35						
		_				

Comment Code

E2: Schedule repair of erosion site prior to the next inspection.

Inspector Comment



View of erosion at top of slope. Fall 2018

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	2.80	Rating **	A/W	Issue No.	35 (cont)		
LM End	2.80	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS L	atitud	e/Longitude	
Category				Start		End	
Item	Erosion / Bank Caving			38.3604	32°	38.360432 °	
item				-121.5616	644°	-121.561644 °	
DWR ID	DWR_RD0	150_03_s _ 201	13_35				
		Comn	nent Cod	de			
E2 : Sche	dule repair	of erosion site	e prior to	the next in	spec	tion.	
Inspector Comment							



View of erosion on the waterside of the levee during spring 2017 inspection.

LM Start	2.81	Rating **	С	Issue No.		71		
LM End	2.81	Issue Type +	Ма	Location *		LS		
Category Earthen Levee				GPS Latitude/Longitude				
Category	Category					End		
Item	Animal Co	ontrol		38.3604	77°	38.360477°		
пеш			-121.561625 °		-121.561625 °			
DWR ID	DWR ID DWR_RD0150_03_s _ 2017_71							
Comment Code								

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

No	Pł	not	os

LM Start	2.82	Rating **	М	Issue No.		17	
LM End	2.82	Issue Type +	Ма	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Category				Start		End	
Item	Encroachi	ments		38.3606	21 °	38.360621 °	
item				-121.5617	'62 °	-121.561762°	
DWR ID	DWR_RD0	150_03_s _ 201	2_17				
		Comn	nent Cod	de			
TR : Tree	or limb						
		Inspecto	or Comm	nent			
Remove down tree on the waterside toe of the levee.							



View of tree stumps and downed stree on the waterward slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	2.95	Rating **	М	Issue No.		86		
LM End	2.95	Issue Type +	Ma	Location *		WS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Encroachi	ments		38.3624	31 °	38.362431 °		
item				-121.5622	265°	-121.562265 °		
DWR ID DWR_RD0150_03_s _ 2018_86								
		Comn	nent Cod	de				
TR : Tree	or limb							
		Inspecto	or Comm	nent				
Remove downed tree on waterside slope.								
·								



Downed tree waterside looking southwest. Spring 2018

LM Start	3.34	Rating **	М	Issue No.		27
LM End	3.34	Issue Type +	Ма	Location *		WS
Category	Earthen L	evee	GPS Latitude/Longitude			
Calegory				Start		End
Item	Encroach		38.3631	47°	38.363147°	
пеш				-121.5561	90°	-121.556190°
DWR ID	DWR_RD0	150_03_s _ 201	2_27			

Comment Code

TR: Tree or limb

Inspector Comment

Downed tree on the waterside toe of the levee.



View of downed tree on the waterside slope looking upstream.

LM Start	3.36	Rating **	М	Issue No.		102		
LM End	3.36	Issue Type +	Ma	Location *		WS		
Category	Earthen L	evee		GPS La	atituc	de/Longitude		
Category				Start		End		
Item	Erosion / Bank Caving			38.363254°		38.363254	0	
пеш				-121.555889 °		-121.555889	0	
DWR ID	DWR_RD0	150_03_s _ 201	8_102					
		Comn	nent Coo	de				
E1 : Note and monitor erosion site.							_	
	Inspector Comment							

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	3.37	Rating **	A/W	Issue No.	76		
LM End	3.45	Issue Type +	Ма	Location *	WS		
Category Earthen Levee			GPS Latitude/Longitude				
Calegory	zategory			Start		End	
ltom	Item Riprap Revetments			38.363380°		38.364325°	
пеш				-121.555715 °		-121.555330°	
DWR ID	DWR ID DWR_RD0150_03_s _ 2017_76					·	
Comment Code							

Inspector Comment

LMA or the pipe owner has placed new riprap on the waterside slope.

Photo 1 of 1: FA_2018_RD0150_17_76_20180910_00067.jpg



View of the new riprap on the waterside slope of the levee looking downstream. Spring 2017

Photo 1 of 3: FA_2018_RD0150_17_115_20180910_00111.jpg

LM Start	3.39	Rating **	U	Issue No.		115	
LM End	3.39	Issue Type +	Ма	Location *	LS		
Category Earthen Levee			GPS Latitude/Longitude				
Category				Start		End	
Item	Erosion /	Erosion / Bank Caving			40°	38.363540°	
пеш				-121.5555	54°	-121.555554°	
DWR ID DWR_RD0150_03_f _ 2013_115							
Comment Code							

Calegory		Start	End				
Item	Erosion / Bank Caving	38.363540°	38.363540°				
item		-121.555554°	-121.555554°				
DWR ID	DWR_RD0150_03_f _ 2013_115						
	Comment Cod	le					
E2 : Schedule repair of erosion site prior to the next inspection.							
	Inspector Comm	ent					
Erosion (ditch) was found on the landside toe of the levee.							

Issue No.

Location *

115 (cont)

LS

Rating **

Issue Type +

LM Start

LM End

3.39 3.39

A TANK THE PARTY OF	WAR IN	10/A-	The second second	Silver Alberta
				1007
				W.
			K.	
				111/03/20

View of the ditch on the landside toe of the levee. Fall 2016

Photo 2 of 3: FA_2018_RD0150_17_115_20180910_00112.jpg



View of the ditch on the landside toe of the levee during fall 2015 inspection.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	3.39	Rating **	U	Issue No.	115 (cont)		
LM End	3.39	Issue Type +	Ma	Location *	LS		
Catagony	Earthen Levee			GPS Latitude/Longitude			
Calegory	Category			Start		End	
Item	Erosion / Bank Caving			38.363540°		38.363540°	
пеш				-121.555554 °		-121.555554 °	
DWR ID	DWR_RD0	150_03_f _ 201	3_115				
Comment Code							
E2 : Schedule repair of erosion site prior to the next inspection.							

Inspector Comment Erosion (ditch) was found on the landside toe of the levee.

Photo 3 of 3: FA_2018_RD0150_17_115_20180910_00113.jpg



A drainage ditch with depth of 4 feet and width of 15 feet was found on the landside toe of the levee. The picture was taken from the landside slope looking upstream during the fall 2013 inspection.

LM Start	3.45	Rating **	A/W	Issue No.	91		
LM End	3.46	Issue Type +	Ma	Location *	WS		
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	2017 Stor	2017 Storm Damage			50°	38.364567°	
пеш					31 °	° -121.555333	
DWR ID DWR_RD0150_03_f _ 2017_91							
Comment Code							

Inspector Comment

Levee Evaluation Comments

Description:On 11 January 2017 and 7 February 2017, waterside instability and erosion were observed on the east (left) bank of Elk Slough. The site is approximately 43 feet long and 11 feet down from the levee crest. See attached pages for photos.

Site ID No:302

Site Designation:LMA-128 Repair Type: Erosion Rating:Area of Concern Field Date:7/18/2017

Notes: Erosion on lower 2/3 of slope. Crown is a paved road. Area of concern because erosion was not as severe and there was lots of vegetation on the lower slope indicating damage may be older. WS slope has been rocked just downstream of this site.

Photo 1 of 3: LEVAL_FA_2018_302_2086.jpg

LS: Land Side WS: Water Side

N/A: Not Applicable

Acceptable Minimally Acceptable U : Unacceptable

N: Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	3.45	Rating **	A/W	Issue No.	91 (cont)		
LM End	3.46	Issue Type +	Ма	Location *		WS	
Supplemental				GPS Latitude/Longitude			
Category		Start		End			
Item	2017 Stor	m Damage		38.3644	50°	38.364567°	
пеш				-121.5553	31 °	-121.555333°	
DWR ID	ID DWR_RD0150_03_f _ 2017_91						
	Comment Code						

Inspector Comment

Levee Evaluation Comments

Description:On 11 January 2017 and 7 February 2017, waterside instability and erosion were observed on the east (left) bank of Elk Slough. The site is approximately 43 feet long and 11 feet down from the levee crest. See attached pages for photos.

Site ID No:302

Site Designation:LMA-128

Repair Type: Erosion Rating:Area of Concern

Field Date:7/18/2017

Notes: Erosion on lower 2/3 of slope. Crown is a paved road. Area of concern because erosion was not as severe and there was lots of vegetation on the lower slope indicating damage may be older. WS slope has been rocked just downstream of this site.

LM Start	3.45	Rating **	A/W	Issue No.	91 (cont)
LM End	3.46	Issue Type +	Ma	Location *	WS



Photo 3 of 3: LEVAL_FA_2018_302_2089.jpg



* Location LS : Land Side N/A : No WS : Water Side

N/A: Not Applicable

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected + Issue Type

Ma : Maintenance Deficiancy

Ob : Design & System Obsolescence
En : Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	3.93	Rating **	С	Issue No.	106			
LM End	3.94	Issue Type +	Ма	Location *	LS			
Category Earthen Levee				GPS Latitude/Longitude				
Category	Category					End		
Item	Vegetatio	n		38.36887	74°	38.369025	0	
пеш				-121.55136	69°	-121.551401	0	
DWR ID DWR_RD0150_03_s _ 2018_106								
	Comment Code							

 $\ensuremath{\text{V2}}$: Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

No Photos

LM Start	4.02	Rating **	М	Issue No.		93
LM End	4.02	Issue Type + Ma Location *		Location *		WS
Category	evee	GPS Latitude/Longitude				
Calegory						End
Item	Erosion /	Bank Caving		38.3701	25 °	38.370125°
item			-121.5520	30°	-121.552030 °	
DWR ID	DWR_RD0	150_03_s _ 201	6_93			

Comment Code

E1: Note and monitor erosion site.

Inspector Comment

Erosion on the waterside toe of the levee.

Photo 1 of 1: FA_2018_RD0150_17_93_20180910_00090.jpg



Erosion was found on the waterside toe of the levee. Spring 2016

LM Start	4.36	Rating **	A/W	Issue No. 12		126	
LM End	4.36	Issue Type +	Ma	Location *	WS		
Category	Earthen Levee				GPS Latitude/Longitude		
Category			Start		End		
Item	Encroach	ments		38.37419	91 °	38.374191	0
item			-121.54981	8°	-121.549818	0	
DWR ID	DWR_RD0	150_03_f _ 201	7_126				

TR : Tree or limb

Inspector Comment

Comment Code

A tree fell on the channel, and tree root might erode the waterside toe of the levee.

Photo 1 of 1 : FA_2018_RD0150_17_126_20180910_00130.jpg



View of a fallen tree on the waterside toe of the levee. Fall 2017

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	4.39	Rating **	A/W	Issue No. 98		98		
LM End	4.43	Issue Type +	Ma	Location *		WS		
Supplemental				GPS Latitude/Longitude				
Calegory	Category				Start			
Item	2017 Stor	m Damage		38.3742	78°	38.374278	۰	
пеш				-121.5491	67°	-121.548511	0	
DWR ID	DWR ID DWR_RD0150_03_f _ 2017_98							
	Comment Code							

Inspector Comment

Levee Evaluation Comments

Description:Between 11 and 19 January 2017, waterside instability and erosion were observed on the east (left) bank of Elk Slough. The site is approximately 88 feet long, 7 feet below the levee crest, and includes a fallen tree and exposed root ball in the levee slope. See attached pages for photos.

Site ID No:304

Site Designation:LMA-130 Repair Type: Erosion Rating:Serious

Field Date:7/18/2017

Notes: Crown is a paved road. Near vertical on lower 1/2 of slope oncluding a fallen tree with exposed root ball. Serious because sloughing cuts into already oversteepened prism significantly and visible longitudinal cracking near crown.

LM Start	4.39	Rating **	A/W	Issue No.	98 (cont)
LM End	4.43	Issue Type +	Ma	Location *	WS



Photo 2 of 3: LEVAL_FA_2018_304_2075.jpg



* Location

LS: Land Side N/A: No WS: Water Side

N/A : Not Applicable

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected + Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	4.39	Rating **	A/W	Issue No.	sue No. 98 (cont		
LM End	4.43	Issue Type +	Ма	Location *		WS	
Supplemental				GPS Latitude/Longitude			
Category				Start		End	
Item	2017 Stor	m Damage		38.3742	78°	38.374278°	
пеш				-121.5491	67°	-121.548511 °	
DWR ID	DWR_RD0	_RD0150_03_f _ 2017_98					
	Comment Code						

Inspector Comment

Levee Evaluation Comments

Description:Between 11 and 19 January 2017, waterside instability and erosion were observed on the east (left) bank of Elk Slough. The site is approximately 88 feet long, 7 feet below the levee crest, and includes a fallen tree and exposed root ball in the levee slope. See attached pages for photos.

Site ID No:304

Site Designation:LMA-130 Repair Type: Erosion Rating:Serious

Field Date:7/18/2017
Notes: Crown is a paved road. Near vertical on lower 1/2 of slope oncluding a fallen tree with exposed root ball. Serious because sloughing cuts into already oversteepened prism significantly and visible longitudinal cracking near crown.



LM Start	4.47	Rating **	A/W	Issue No.		108	
LM End	4.49	Issue Type +	Ма	Location *		WS	
Category Supplemental				GPS Latitude/Longitude			
				Start		End	
Itom	2017 Stor	m Damage		38.3743	14°	38.374344°	
Item				-121.5477	53°	-121.547447°	
DWR ID DWR_RD0150_03_f _ 2017_108							
Comment Code							

Inspector Comment

Levee Evaluation Comments

Description:Between 11 January 2017 and 7 February 2017, instability, cracking, and erosion of the waterside levee slope were observed on the east (left) bank of Elk Slough. The site is approximately 88 feet long. See attached pages for photos.

Site ID No:305

Site Designation:LMA-131

Repair Type: Erosion

Rating:Serious

Field Date:7/18/2017

Notes: Crown is a paved road. Near vertical sloughing on the lower 2/3 of the prisim. House and ramp/driveway on the LS. Serious because sloughing cuts into already oversteepened prism significantly.

Photo 1 of 2: LEVAL_FA_2018_305_2066.jpg



LS : Land Side N/A : Not Applicable

US: Land Side N/A: Not A

** Rating

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated

C : Corrected

A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence

En : Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	4.47	Rating **	A/W	Issue No.		108 (cont)
LM End	4.49	Issue Type +	Ма	Location *		WS
Category	Supplemental			GPS Latitude/Longitude		
Calegory	Category			Start		End
ltom	2017 Stor	m Damage		38.3743	14°	38.374344°
пеш	Item				53°	-121.547447°
DWR ID DWR_RD0150_03_f _ 2017_108						
Comment Code						

Inspector Comment

Levee Evaluation Comments

Description:Between 11 January 2017 and 7 February 2017, instability, cracking, and erosion of the waterside levee slope were observed on the east (left) bank of Elk Slough. The site is approximately 88 feet long. See attached pages for photos.

Site ID No:305

Site Designation:LMA-131

Repair Type: Erosion

Rating:Serious

Field Date:7/18/2017

Notes: Crown is a paved road. Near vertical sloughing on the lower 2/3 of the prisim. House and ramp/driveway on the LS. Serious because sloughing cuts into already oversteepened prism significantly.



LM Start	4.79	Rating **	М	Issue No.		101	
LM End	4.79	Issue Type +	Ma	Location *		WS	
Category Earthen Levee			GPS Latitude/Longitude				
			Start		End		
Item	Erosion /	Bank Caving		38.3765	62°	38.376562°	
пеш			-121.5430	16°	-121.543016°		
DWR ID DWR_RD0150_03_s _ 2017_101							
Comment Code							

E2: Schedule repair of erosion site prior to the next inspection.

Inspector Comment



View of an erosion on the waterside toe of the levee. Spring 2017

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	4.99	Rating **	М	Issue No.		36	
LM End	4.99	Issue Type +	Ma	Location *		WS	
Earthen Levee				GPS La	atitud	le/Longitude	
Category				Start		End	
Item	Slope Sta	bility		38.3787	71°	38.378771 °	
item			-121.540538°		-121.540538 °		
DWR ID DWR_RD0150_03_f _ 2012_36							
Comment Code							
S1 : Repai	r slope ins	tability.					
			•				
		Inspecto	or Comm	nent			

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The second of th	
11/17/2015	
"我们是我们的,我们就是我们的,我们就是我们的,我们就是我们的,我们就是我们的,我们就是我们的,我们就是我们的,我们就是我们的,我们就是我们的,我们就是我们	

View of slope instability on the waterside shoulder of the levee during fall 2015 inspection.

LM Start	4.99	Rating **	М	Issue No.	36 (cont)
LM End	4.99	Issue Type +	Ma	Location *	WS





Slope instability was found on the waterside of the levee looking upstream.

LM Start	5.00	Rating **	М	Issue No.		124		
LM End	5.00	Issue Type +	Ма	Location *	WS			
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Category				Start		End		
Item	Encroachi	ments		38.3788	888°	38.378888 °		
item				-121.540486 °		6° -121.540486°		
DWR ID DWR_RD0150_03_s _ 2018_124								
	Comment Code							
DE : Debri	S							
			_					
		Inspecto	or Comm	ent				

No Photos

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	5.06	Rating **	A/W	Issue No.		959
LM End	5.06	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS La	titud	e/Longitude
Calegory	лу			Start		End
Item	DWR UCI	DWR UCIP LMA Responsibility)7°	38.379697 °
item			-121.54007	o°	-121.540070 °	
DWR ID	22446					

Inspector Comment

Comment Code

FS_ID:49386 DS_ID:22446 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 5/2014 Recordation from permit files 13736 match

photos and approximate location of UCIP confirmed

crossing.8/2013- a smaller pump on WS steel deck and was running.- seems 30-inch steel pipe goes through the levee.- GI

electric conduit on WS and power pole on LS.

FIELD_STRUCT_DESC: 24-inch steel drainage discharge pipe through the levee, 10.5 feet below the crown. Flap gate on the waterside (WS) end. Pump and gate valve at the landside (LS) toe. (Plans to install a 24-inch discharge pipeline through the levee authorized under Permit No. 13736, 1983 - Reclamation District No. 150 [RD0150]). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 112, March 1957, (HLM 5.15), 30-inch pipe referenced, invert elevation 14.5 feet below the crown].

FS Date: 8/23/2013

LM Start	5.06	Rating **	A/W	Issue No.	959 (cont)
LM End	5.06	Issue Type +	Ma	Location *	



WS view: pipe, steel deck, pressure tank, electric control box on stream

Photo 2 of 3: UCIP_FA_2018_49386_63901.jpg



WS view: a smaller pump on steel deck. It was working during the survey.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	5.06	Rating **	A/W	Issue No.		959 (cont)
LM End	5.06	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS La	titud	e/Longitude
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	38.37969	97°	38.379697°
пеш				-121.54007	'0	-121.540070 °
DWR ID	22446					

Inspector Comment

Comment Code

FS ID:49386 DS_ID:22446 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 5/2014 Recordation from permit files 13736 match

photos and approximate location of UCIP confirmed

crossing.8/2013- a smaller pump on WS steel deck and was running.- seems 30-inch steel pipe goes through the levee.- GI

electric conduit on WS and power pole on LS.

FIELD_STRUCT_DESC: 24-inch steel drainage discharge pipe through the levee, 10.5 feet below the crown. Flap gate on the waterside (WS) end. Pump and gate valve at the landside (LS) toe. (Plans to install a 24-inch discharge pipeline through the levee authorized under Permit No. 13736, 1983 - Reclamation District No. 150 [RD0150]). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 112, March 1957, (HLM 5.15), 30-inch pipe referenced, invert elevation 14.5 feet below the crownl.

FS Date: 8/23/2013



WS view: siphon breaker on pipe in steel deck on stream bank.

LM Start	5.14	Rating **	М	Issue No.	941			
LM End	5.14	Issue Type +	Ma	Location *	CR			
Category	evee	GPS Latitude/Longitude						
Calegory			Start		End			
Item	Crown Su	rface / Depres	ssions /	38.38077	9°	38.380779°		
пеш	Rutting			-121.54026	4 °	-121.540264°		
DWR ID	DWR ID DWR_RD0150_03_s _ 2012_941							
	Comment Code							

C2: Repair depressions or ruts in the crown or slope.

Inspector Comment

There is a significant difference in the crown roadway elevation as it transitions from the paved roadway to the gravel access road.

Photo 1 of 1: FA_2018_RD0150_17_941_20180910_00139.jpg



View of varying elevations in the crown of the levee at the transition from county road to access road.

Location + Issue Type Ma: Maintenance Deficiancy LS: Land Side N/A: Not Applicable Acceptable N: Not Inspected/Rated WS: Water Side Minimally Acceptable Ob : Design & System Obsolescence C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	5.15	Rating **	A/W	Issue No.	No. 111		
LM End	5.15	Issue Type +	Ma	Location *		WS	
Category	ental	GPS La	titud	e/Longitude			
Calegory	Category					End	
Item	2017 Stor	m Damage		38.3809	06°	38.380928°	
пеш				-121.5403	44 °	-121.540364°	
DWR ID	WR ID DWR_RD0150_03_f _ 2017_111						
	Comment Code						

Inspector Comment

Levee Evaluation Comments

Description:On 19 January 2017, two large trees were observed to have fallen into the water exposing the root ball on the waterside levee slope on the east (left) bank of Elk Slough. The site is approximately 10 feet long. See attached pages for photos.

Site ID No:309

Site Designation:LMA-135

Repair Type: Erosion

Rating:Area of Concern

Field Date:7/18/2017

Notes: 2 oak trees fell over at the WS toe and took root balls out of the lower slope about 5 ft deep just above the water line. Area of concern because damage is only on the lower slope near the water line.

LM Start	5.15	Rating **	A/W	Issue No.	111 (cont)
LM End	5.15	Issue Type +	Ma	Location *	WS



Photo 2 of 3: LEVAL_FA_2018_309_2038.jpg



Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	5.15	Rating **	A/W	Issue No. 111 (con		111 (cont)		
LM End	5.15	Issue Type +	Ма	Location * WS		WS		
Category	GPS Lat	itud	le/Longitude					
Calegory						End		
Item	2017 Stor	m Damage		38.38090	6°	38.380928	0	
пеш				-121.54034	4 °	-121.540364	0	
DWR ID DWR_RD0150_03_f _ 2017_111								
	Comment Code							

Inspector Comment

Levee Evaluation Comments

Description:On 19 January 2017, two large trees were observed to have fallen into the water exposing the root ball on the waterside levee slope on the east (left) bank of Elk Slough. The site is approximately 10 feet long. See attached pages for photos.

Site ID No:309

Site Designation:LMA-135

Repair Type: Erosion

Rating:Area of Concern Field Date:7/18/2017

Notes: 2 oak trees fell over at the WS toe and took root balls out of the lower slope about 5 ft deep just above the water line. Area of concern because damage is only on the lower slope near the water line.



LM Start	5.15	Rating **	A/W	Issue No.	72		
LM End	5.15	Issue Type +	Ma	Location *	WS		
Category	evee	GPS La	titud	e/Longitude			
Calegory	Category					End	
Item	Encroach	ments		38.38094	40 °	38.380940 °	
item				-121.54038	34 °	-121.540384°	
DWR ID DWR_RD0150_03_f _ 2016_72							
Comment Code							

TR : Tree or limb

Inspector Comment

Tree stump and broken tree were found on the waterside toe.

Photo 1 of 1: FA_2018_RD0150_17_72_20180910_00064.jpg



View of tree stump and broken tree on the waterside toe of the levee. Fall 2016

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	5.19	Rating **	М	Issue No.		125		
LM End	5.19	Issue Type +	Ма	Location *		WS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Encroachi	ments		38.3813	52°	38.381352 °		
item				-121.5407	97°	-121.540797°		
DWR ID	DWR_RD0	150_03_s _ 201	8_125					
		Comn	nent Cod	de				
TR : Tree	or limb							
	Inspector Comment							

No Photos

LM Start	5.32	Rating **	М	Issue No.		96
LM End	5.32	Issue Type +	Ma	Location *		WS
Category	Earthen L	evee	GPS Latitude/Longitude			
Calegory				Start		End
Item	Encroach	ments		38.3818	43°	38.381843°
пеш				-121.5431	17°	-121.543117°
DWR ID	DWR_RD0150_03_s _ 2016_96					

Comment Code

TR: Tree or limb

Inspector Comment

Broken tree/root damaged levee slope and needs to be removed.

Photo 1 of 1: FA_2018_RD0150_17_96_20180910_00093.jpg



Broken tree roots and tree trunks were found on the waterside toe of the levee. Spring 2016

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	5.40	Rating **	A/W	Issue No.		114	_
LM End	5.41	Issue Type +	Ма	Location *		WS	
Category			GPS Lat	itud	e/Longitude		
Calegory	Category					End	
Item	2017 Stor	m Damage		38.38216	9°	38.382206	0
пеш			-121.54459	7°	-121.544731	0	
DWR ID	DWR_RD0	150_03_f _ 201	7_114				

Inspector Comment

Comment Code

Levee Evaluation Comments

Description:Cracking and erosion were observed on the waterside levee slope on the east (left) bank of Elk Slough. The site is approximately 40 feet long. See attached pages for photos.

Site ID No:310

Site Designation:LMA-136

Repair Type: Erosion

Rating:Serious

Field Date:7/17/2017

Notes: Large oak tree fell over here and took a root ball with it. At least 15 ft wide by 5ft deep soil missing, 5 ft from crown. Longitudinal cracks for 40 ft along crown hinge. Serious because prism is impacted and cracking is visible beyond the damaged area.

LM Start	5.40	Rating **	A/W	Issue No.	114 (cont)
LM End	5.41	Issue Type +	Ma	Location *	WS



Photo 2 of 3: LEVAL_FA_2018_310_2190.jpg



Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	5.40	Rating **	A/W	Issue No.		114 (cont)
LM End	5.41	Issue Type +	Ма	Location *	WS	
Category Supplemental			GPS La	titud	le/Longitude	
			Start		End	
Item	2017 Stor	m Damage		38.38216	69°	38.382206
пеш		-121.54459	97°	-121.544731		
DWR ID DWR_RD0150_03_f _ 2017_114						
Comment Code						

Inspector Comment

Levee Evaluation Comments

Description:Cracking and erosion were observed on the waterside levee slope on the east (left) bank of Elk Slough. The site is approximately 40 feet long. See attached pages for photos.

Site ID No:310

Site Designation:LMA-136

Repair Type: Erosion

Rating:Serious

Field Date:7/17/2017

Notes: Large oak tree fell over here and took a root ball with it. At least 15 ft wide by 5ft deep soil missing, 5 ft from crown. Longitudinal cracks for 40 ft along crown hinge. Serious because prism is impacted and cracking is visible beyond the damaged area.



LM Start	5.49	Rating **	N	Issue No.		74		
LM End	5.49	Issue Type +	Ma	Location *	WS			
Category Earthen Levee				GPS Latitude/Longitude				
Category			Start		End			
Item	Trim / Thi	n Trees		38.38305	51 °	38.383051	٥	
пеш				-121.54573	85 °	-121.545735	0	
DWR ID	DWR_RD0	150_03_f _ 201	6_74					

Comment Code

T5: Tree stumps.

Inspector Comment

Tree stump and broken tree on the waterside shoulder of the levee need to be removed.

Photo 1 of 1 : FA_2018_RD0150_17_74_20180910_00	066.jpg
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View of tree trunks on the waterside shoulder of the levee. Fall 2016

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	5.56	Rating **	N	Issue No.		68	
LM End	5.56	Issue Type +	Ма	Location *	WS		
Earthen Levee				GPS La	atitud	le/Longitude	
Category				Start		End	
Item	Trim / Thin Trees			38.3836	97°	38.383697°	
item				-121.5452	01°	-121.545201°	
DWR ID DWR_RD0150_03_s _ 2012_68							
		Comn	nent Cod	de			
T5 : Tree s	tumps.						
Inspector Comment							



Tree stump was found on the waterside of the levee looking upstream. Fall 2011

LM Start	5.69	Rating **	С	Issue No.	41		
LM End	5.69	Issue Type +	Ма	Location *	WS		
Category Earthen Levee				GPS La	tituc	le/Longitude	
				Start		End	
Item	Trim / Thi	n Trees		38.38396	9°	38.383969 °	
item				-121.542806 °		-121.542806 °	
DWR ID DWR_RD0150_03_s _ 2012_41							
Comment Code							

T5: Tree stumps.

Inspector Comment

No Photos

LM Start	5.71	Rating **	U	Issue No.		104	
LM End	5.71	Issue Type +	Ма	Location *		LS	
Category Earthen Levee				GPS Latitude/Longitude			
				Start		End	
Item	Animal Control			38.3840	26°	38.384026°	
пеш			-121.542455 °		-121.542455°		
DWR ID DWR_RD0150_03_s _ 2017_104							
		C		l a			

Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

Animal hole appears to be inactive but should be backfilled.



View of animal hole on landside toe. Fall 2018

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	5.71	Rating **	U	Issue No.		104 (cont)
LM End	5.71	Issue Type +	Ма	Location *		LS
Catagony	Earthen L	GPS Latitude/Longitude				
Category		Start		End		
Item	Animal Co	ontrol		38.38402	26°	38.384026°
пеш			-121.5424	55 °	-121.542455 °	
DWR ID	DWR_RD0	150_03_s _ 201	7_104			

Comment Code

A3: No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

Animal hole appears to be inactive but should be backfilled.

Photo 2 of 2: FA_2018_RD0150_17_104_20180910_00099.jpg



View of a rodent hole on the landside toe of the levee. Spring 2017

LM Start	5.73	Rating **	С	Issue No.	127	
LM End	5.73	Issue Type +	Ma	Location *	LS	
Catagory	Earthen L	GPS Latitude/Longitude				
Category		Start		End		
Item	Animal Co	ontrol		38.3840	61 °	38.384061 °
item	tem		-121.5421	69°	-121.542169°	
DWR ID DWR_RD0150_03_f _ 2017_127						

Comment Code

A3: No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

No Photos

LM Start	5.78	Rating **	М	Issue No.		28	
LM End	5.78	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Vegetatio	n		38.3843	33°	38.384333	0
item				-121.5413	10°	-121.541310	0
DWR ID	DWR RD0	150 03 s 201	2 28				Т

Comment Code

V2: Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment



Wild growth was found on the waterside slope of the levee looking upstream.

Location

N/A: Not Applicable

LS: Land Side WS: Water Side

: Acceptable : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated

C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy Ob : Design & System Obsolescence

En: Enforcement

Thursday, December 27, 2018 09:35 Page 32 of 46 **FINAL DATA**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	5.82	Rating **	M	Issue No.		57		
LM End	5.82	Issue Type +	Ma	Location *		LS		
Category Earthen Levee				GPS Latitude/Longitude				
Calegory	Category			Start		End		
Item	Encroachments			38.384648 °		38.384648 °		
item		-121.540669°		9° -121.540669°				
DWR ID	DWR_RD0	150_03_s _ 201	12_57					
		Comn	nent Cod	de				
TR : Tree	or limb							
Inspector Comment								
	·							



View of a tree trunk lying on the landward slope blocking visibility.

LM Start	6.23	Rating **	N	Issue No.	49		
LM End	6.23	Issue Type +	Ма	Location *	WS		
Category Earthen Levee				GPS Latitude/Longitude			
Calegory		Start		End			
Item	Trim / Thi	n Trees		38.3896	58°	38.389658°	
пеш				-121.5415	18°	-121.541518°	
DWR ID	DWR ID DWR_RD0150_03_s _ 2012_49						
	Comment Code						

T5: Tree stumps.

Inspector Comment



View of tree stumps on the waterward slope.

LM Start	6.70	Rating **	U	Issue No.		46	
LM End	6.70	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Vegetatio	n		38.3951	18°	38.395118	0
пеш				-121.5386	13 °	-121.538613	0
DWR ID	DWR RD0	150_03_f _ 201	8 46				

Comment Code

 $\ensuremath{\mathsf{V2}}$: Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

Remove wild growth down to 20 ft. from levee shoulder.



View of wild growth within levee easement. Fall 2018

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	6.79	Rating **	С	Issue No.		119
LM End	6.80	Issue Type +	Ма	Location *	WS	
Catagory	Category			GPS Latitude/Longitude		
Calegory	Category			Start		End
Item	2017 Stor	m Damage		38.39583	3°	38.395850
пеш					0°	-121.537083
DWR ID	DWR_RD0	150_03_f _ 201	7_119			

No Photos

Inspector Comment

Comment Code

Levee Evaluation Comments

Description:On 10 February 2017, instability, cracking, and sloughing of the waterside levee slope were observed on the east (left) bank of Elk Slough. The site is approximately 20 feet long. See attached pages for photos

Site ID No:312

Site Designation:LMA-139

Repair Type: Stability

Rating:Critical

Field Date:7/19/2017

Notes: Crown is paved. Serious because erosion cuts into prism significantly, but not into crown. Worst damage is above a fallen tree, sloughing comes within 6 ft of crown here. Fall 2018 DWR Inspector: LMA repaired slope damage.

LM Start	6.80	Rating **	С	Issue No.		107		
LM End	6.80	Issue Type +	Ma	Location *	WS			
Category Earthen Levee				GPS Latitude/Longitude				
Calegory	Category					End		
Item	Erosion /	Bank Caving		38.3958	93°	38.395893°		
пеш				-121.5370	41 °	-121.537041°		
DWR ID	D DWR_RD0150_03_s _ 2018_107							
	Comment Code							

E2: Schedule repair of erosion site prior to the next inspection.

Inspector Comment

No Photos

* Location LS: Land Side WS: Water Side

N/A: Not Applicable

A : Acceptable M : Minimally A Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type Ma : Maintenance Deficiancy

Ob : Design & System Obsolescence En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	6.86	Rating **	С	Issue No.		120
LM End	6.87	Issue Type +	Ма	Location *		WS
Category			GPS Latitude/Longitude			
Calegory				Start		End
Item	2017 Stor	m Damage		38.3962	33 °	38.396294°
item				-121.5360	64 °	-121.535947°
DWR ID	DWR_RD0	150_03_f _ 201	7_120			

No Photos

Inspector Comment

Comment Code

Levee Evaluation Comments

Description:On 10 February 2017, instability, cracking, and sloughing of the waterside levee slope were observed on the east (left) bank of Elk Slough. The site is approximately 40 feet long. See attached pages for photos.

Site ID No:313

Site Designation:LMA-140

Repair Type: Stability

Rating:Critical

Field Date:7/19/2017

Notes: Crown is a paved road. Serious because of extensive cracking up to hinge, high traffic volume due to nearby winery and lower 2/3 - 1/2 of slope is near vertical. Fall 2018 DWR Inspector: LMA repaired cracking and erosion damage.

LM Start	6.95	Rating **	A/W	Issue No.		121	
LM End	6.95	Issue Type +	Ma	Location *	WS		
Supplemental			GPS Latitude/Longitude				
Calegory	Category			Start		End	
Item	2017 Stor	m Damage		38.3971	97°	38.397225°	
пеш				-121.5350	89°	-121.535092°	
DWR ID DWR_RD0150_03_f _ 2017_121							
Comment Code							

Inspector Comment

Levee Evaluation Comments

Description:Erosion was observed on the waterside levee slope on the east (left) bank of Elk Slough. The site is approximately 10 feet long and progresses up to the levee crown. See attached pages for photos. Site ID No:

Site Designation:LMA-141

Repair Type: Erosion

Rating:Area of Concern

Field Date:7/19/2017

Notes: Area of concern because the site is so small and only looks slightly worse than the surounding levee slope. Crown is a paved road.





LS : Land Side N/A : Not Applicable

WS : Water Side N/A : Not App

** Rating

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated

C : Corrected

A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence

En : Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	6.95	Rating **	A/W	Issue No. 121 (c		121 (cont)	
LM End	6.95	Issue Type +	Ma	Location * WS		WS	
Category			GPS Latitude/Longitude				
Calegory				Start		End	
Item	2017 Stor	m Damage		38.39719	97 °	38.397225 °	
пеш				-121.53508	39°	-121.535092°	
DWR ID DWR_RD0150_03_f _ 2017_121							
Comment Code							

Inspector Comment

Levee Evaluation Comments

Description:Erosion was observed on the waterside levee slope on the east (left) bank of Elk Slough. The site is approximately 10 feet long and progresses up to the levee crown. See attached pages for photos. Site ID No:

Site Designation:LMA-141

Repair Type: Erosion Rating:Area of Concern

Field Date:7/19/2017

Notes: Area of concern because the site is so small and only looks slightly worse than the surounding levee slope. Crown is a paved road.

LM Start	6.95	Rating **	A/W	Issue No.	121 (cont)
LM End	6.95	Issue Type +	Ma	Location *	WS





** Rating

LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown

** Rating

A : Acceptable N : Not Inspected/Rated M: Maintenance Deficiancy

M : Minimally Acceptable C: Corrected Ob : Design & System Obsolescence

U : Unacceptable A/W : Acceptable but Monitor & Maintain En : Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

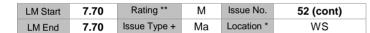
Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	7.70	Rating **	М	Issue No.		52
LM End	7.70	Issue Type +	Ma	Location *		WS
Cotagon Earthen Levee			GPS Latitude/Longitude			
Category				Start		End
Item	Encroach	ments		38.4055	36°	38.405536°
item				-121.5427	52°	-121.542752°
DWR ID DWR_RD0150_03_f _ 2015_52						
Comment Code						

TR: Tree or limb

Inspector Comment

Tree trunks and stumps need to be removed from levee slope.





View of the tree trunk on the waterside toe of the levee. Fall 2018

Photo 2 of 2: FA_2018_RD0150_17_52_20180910_00041.jpg



View of the tree trunk on the waterside toe of the levee. Fall 2015

LM Start	7.74	Rating **	М	Issue No.		396	
LM End	7.74	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS L	atitud	e/Longitude	
Calegory				Start		End	
Item	Slope Sta	bility		38.4060	98°	38.406098 °	
item				-121.543028°		-121.543028°	
DWR ID DWR_RD0150_03_s _ 2015_396							
		Comn	nent Cod	de			
S1 : Repai	r slope ins	tability.					
		Inspecto	or Comm	nent			
Slope instability caused by a fallen tree.							



Slope instability was found on the waterside toe of the levee looking upstream. Spring 2015

* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable U: Unacceptable U: Unacceptable AW: Acceptable but Monitor & Maintain En: Enforcement

** Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable Ob: Design & System Obsolescence En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	7.79	Rating **	М	Issue No.		75	
LM End	7.79	Issue Type +	Ma	Location *		WS	
Category Earthen Levee				GPS Latitude/Longitude			
Calegory	alegory			Start		End	
Item	Encroach	ments		38.406805 °		38.406805°	
itein				-121.5427	03°	-121.542703°	
DWR ID DWR_RD0150_03_f _ 2018_75							
Comment Code							
TR: Tree or limb							

Inspector Comment

Large tree log needs to be removed from levee slope.

Rating **

Issue Type +



View of tree log on levee slope. Fall 2018

Photo 1 of 2: FA_2018_RD0150_17_92_20180910_00088.jpg

LM Start	8.02	Rating **	М	Issue No.	92	
LM End	8.02	Issue Type +	Ма	Location *	WS	
Earthen Levee				GPS Latitude/Longitude		
Calegory	Category			Start		End
Item	Slope Stability			38.4091	30°	38.409130°
item				-121.5399	71 °	-121.539971 °
DWR ID DWR_RD0150_03_s _ 2014_92						

8.02

8.02

LM Start

LM End

		Start	End
Item	Slope Stability	38.409130°	38.409130 °
item		-121.539971 °	-121.539971 °
DWR ID	DWR_RD0150_03_s _ 2014_92		
	Comment Cod	le	
31 : Repai	r slope instability.		
	Inspector Comm	ent	

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View of slope instability on the waterside of the levee looking upstream during spring 2015 inspection.

Photo 2 of 2: FA_2018_RD0150_17_92_20180910_00089.jpg



Slope instability was found on the waterside of the levee looking downstream.

Location LS: Land Side

CR : Crown

N/A: Not Applicable WS: Water Side

: Acceptable : Minimally Acceptable U : Unacceptable

Issue No.

Location *

92 (cont)

WS

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma: Maintenance Deficiancy Ob : Design & System Obsolescence En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	8.05	Rating **	A/W	Issue No.		122		
LM End	8.05	Issue Type +	Ma	Location *	WS			
Category				GPS Latitude/Longitude				
Category			Start		End			
Itom	2017 Storm Damage			38.4092	28°	38.409233 °		
ltem				-121.5393	89°	-121.539356°		
DWR ID DWR_RD0150_03_f _ 2017_122								
Comment Code								

Inspector Comment

Levee Evaluation Comments

Description:Erosion was observed on the waterside levee slope on the east (left) bank of Elk Slough. The site is approximately 10 feet long and progresses up to the levee crown. See attached pages for photos. Site ID No:

Site Designation:LMA-142

Repair Type: Erosion

Rating:Serious

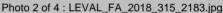
Field Date:7/17/2017

Notes: The erosion extends along most of the slope. Nearby WS banks are all very steep (1:1 or less). Serious because the erosion extend along the entire slope, but not into the crown. Fall 2018 DWR Inspector: Erosion not visible during this inspection but is marked.

LM Start	8.05	Rating **	A/W	Issue No.	122 (cont)
LM End	8.05	Issue Type +	Ma	Location *	WS



View of waterside slope. Fall 2018





Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	8.05	Rating **	A/W	Issue No.	Issue No. 122 (cc	
LM End	8.05	Issue Type +	Ma	Location *		WS
Category			GPS Latitude/Longitude			
Category			Start		End	
ltom	2017 Stor	m Damage		38.4092	28 °	38.409233 °
item	Item			-121.5393	89°	-121.539356°
DWR ID DWR_RD0150_03_f _ 2017_122						
Comment Code						

Inspector Comment

Levee Evaluation Comments

Description:Erosion was observed on the waterside levee slope on the east (left) bank of Elk Slough. The site is approximately 10 feet long and progresses up to the levee crown. See attached pages for photos. Site ID No:

Site Designation:LMA-142

Repair Type: Erosion

Rating:Serious

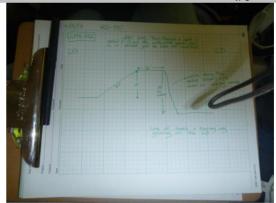
Field Date:7/17/2017

Notes: The erosion extends along most of the slope. Nearby WS banks are all very steep (1:1 or less). Serious because the erosion extend along the entire slope, but not into the crown. Fall 2018 DWR Inspector: Erosion not visible during this inspection but is marked.

LM Start	8.05	Rating **	A/W	Issue No.	122 (cont)
LM End	8.05	Issue Type +	Ma	Location *	WS



Photo 4 of 4: LEVAL_FA_2018_315_2187.jpg



Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

1140	0.06	Rating **	М	Issue No.		6E		
LM Start	8.26	Railing	IVI	issue ivo.		65		
LM End	8.26	Issue Type +	Ма	Location *	WS			
Category Earthen Levee				GPS La	atitud	le/Longitude		
Category				Start		End		
Item	Erosion / I	Bank Caving	38.4082	213°	38.408213°			
пеш				-121.5359)11°	-121.535911 °		
DWR ID DWR_RD0150_03_f _ 2015_65								
Comment Code								
E1: Note a	and monito	r erosion site						
		Inspecto	or Comm	nent				

Photo 1 of 1 : FA_2018_RD0150_17_65_20180910_00056.jpg

View of erosion on the waterside of the levee. Fall 2015

LM Start	8.31	Rating **	М	Issue No.		66		
LM End	8.31	Issue Type + Ma		Location *		WS		
Category Earthen Levee				GPS Latitude/Longitude				
Calegory			Start		End			
Item	Erosion / Bank Caving			38.4079	60°	38.407960	0	
item				-121.5348	98°	-121.534898	0	
DWR ID	DWR_RD0	150_03_s _ 201	2_66					

Comment Code

E2 : Schedule repair of erosion site prior to the next inspection.

Inspector Comment



View of erosion on the waterside of the levee. Spring 2015

LM Start	8.33	Rating **	М	Issue No.		67		
LM End	8.33	Issue Type +	Ma	Location *		WS		
Category Earthen Levee				GPS Latitude/Longitude				
Category				Start		End		
Item	Erosion /	Bank Caving		38.4079	58°	38.407958°		
пеш	item				83 °	-121.534583°		
DWR ID DWR_RD0150_03_s _ 2012_67								
Comment Code								

E1: Note and monitor erosion site.

Inspector Comment



View of the erosion on the waterside shoulder looking upstream during spring 2014 inspection.

* Location

LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown

** Rating

A : Acceptable N : Not Inspected/Rated M: Minimally Acceptable CR : Corrected U: Unacceptable A/W : Acceptable but Monitor & Maintain

** Rating

A : Not Applicable M: Not Inspected/Rated M: Minimally Acceptable D: C: Corrected Ob: Design & System Obsolescence En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	8.33	Rating **	М	Issue No.	67 (cont)		
LM End	8.33	Issue Type +	Ma	Location *	WS		
LIVI ETIU		•••	IVIG	Location	VVS		
Category Earthen Levee				GPS L	atitud	e/Longitude	
Odlogory				Start		End	
Item	Erosion / Bank Caving			38.407958°		38.407958 °	
пеш			-121.534583 °		-121.534583 °		
DWR ID	DWR_RD0	150_03_s _ 201	2_67				
		Comn	nent Cod	de			
E1 : Note a	and monito	or erosion site					
Inspector Comment							



Erosion was found on the waterside shoulder of the levee looking upstream. This picture was taken during fall 2012 inspection.

Photo 1 of 3: LEVAL_FA_2018_316_2180.jpg

LM Start	8.35	Rating **	A/W	Issue No.		123		
LM End	8.35	Issue Type +	Ma	Location *				
Category	Category			GPS Latitude/Longitude				
Calegory			Start		End			
Item	2017 Storm Damage			38.4079	33°	38.407992°		
item			-121.5343	22 °	-121.534289°			
DWR ID	DWR_RD0150_03_f _ 2017_123					·		
	Comment Code							

Inspector Comment

Levee Evaluation Comments

Description:Erosion was observed on the waterside levee slope on the east (left) bank of Elk Slough. The site is approximately 10 feet long. See attached pages for photos.

Site ID No:316

Site Designation:LMA-143 Repair Type: Erosion

Rating:Serious Field Date:7/17/2017

Notes: 3 large trees in/ajacent to site including a fallen tree in the middle of the erosion. Erosion on almost the whole slope, but doesn?t cut into the crown. Serious because erosion cuts into levee significantly here.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	8.35	Rating **	A/W	Issue No.		123 (cont)	
LM End	8.35	Issue Type +	Ma	Location *			
Catagory	Category			GPS Latitude/Longitude			
Category				Start		End	
Item	2017 Stor	m Damage		38.4079	83 °	38.407992 °	
пеш			-121.5343	22 °	-121.534289 °		
DWR ID	DWR_RD0150_03_f _ 2017_123						
	Comment Code						

Inspector Comment

Levee Evaluation Comments

Description:Erosion was observed on the waterside levee slope on the east (left) bank of Elk Slough. The site is approximately 10 feet long. See attached pages for photos.

Site ID No:316

Site Designation:LMA-143

Repair Type: Erosion

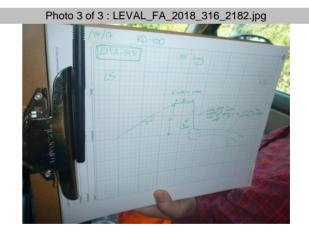
Rating:Serious

Field Date:7/17/2017

Notes: 3 large trees in/ajacent to site including a fallen tree in the middle of the erosion. Erosion on almost the whole slope, but doesn?t cut into the crown. Serious because erosion cuts into levee significantly here.

LM Start	8.35	Rating **	A/W	Issue No.	123 (cont)
LM End	8.35	Issue Type +	Ma	Location *	





Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	8.37	Rating **	С	Issue No.		89	
LM End	8.37	Issue Type +	Ма	Location *	WS		
Category Earthen Levee			GPS Latitude/Longitude				
			Start		End		
Item	Animal Control			38.4081	53°	38.408153°	
пеш				-121.533980 °		-121.533980°	
DWR ID	DWR_RD0	150_03_s _ 201	2_89				
	Comment Code						
A1 : Exterminate rodents and backfill and compact or grout burrows.							

Inspector Comment

No Photos

LM Start	8.46	Rating **	N	Issue No.		90
LM End	8.46	Issue Type +	Ma	Location *	LS	
Category	evee	GPS Latitude/Longitude				
Calegory			Start		End	
Item	Trim / Thin Trees			38.4092	20°	38.409220°
item			-121.532801 °		-121.532801 °	
DWR ID	DWR_RD0150_03_s _ 2012_90					
Comment Code						

T5 : Tree stumps.

Inspector Comment



A tree stump was found on the landside of the levee looking upstream.

LM Start	8.50	Rating **	N	Issue No.	55		
LM End	8.50	Issue Type +	Ma	Location *	WS		
Catagory	Category Earthen Levee			GPS Latitude/Longitude			
Category				Start		End	
Item	Trim / Thi	n Trees		38.4095	59°	38.409559	0
пеш				-121.5323	56°	-121.532356	0
DWR ID	DWR_RD0						
	Comment Code						

T5: Tree stumps.

Inspector Comment



A tree stump was found on the waterside of the levee looking upstream. Fall 2011

* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence U: Unacceptable AW: Acceptable but Monitor & Maintain En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	8.95	Rating **	М	Issue No.		128
LM End	8.95	Issue Type +	Ma	Location *		CR
Catagony	Category Earthen Levee			GPS Latitude/Longitude		
Calegory			Start		End	
Item	Encroachments			38.414831 °		38.414831 °
пеш				-121.5289	82 °	-121.528982 °
DWR ID	DWR_RD0	150_03_s _ 201	8_128			
Comment Code						
TR : Tree or limb						

Inspector Comment

Remainder of downed tree remains on levee crown and shoulder.

Photo 1 of 1: FA_2018_RD0150_17_128_20180910_00132.jpg



Downed tree blocking crown looking north. Spring 2018

LM Start	9.20	Rating **	U	Issue No.		97		
LM End	9.20	Issue Type +	Ма	Location *		WS		
Category Earthen Levee				GPS Latitude/Longitude				
Calegory		Start		End				
Vegetation			38.4133	88°	38.413388	٥		
Item				-121.526130 °		-121.526130	٥	
DWR ID	DWR_RD0150_03_f _ 2018_97							

Comment Code

V2: Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

Grapevines block visibility and need to be cleared.



View of dense vegetation that blocks visibility of levee slope. Fall 2018

LM Start	9.21	Rating **	N	Issue No.		59	
LM End	9.21	Issue Type +	Ma	Location *	WS		
Category	Earthen Levee			GPS Latitude/Longitude			
Calegory				Start		End	
Item	Trim / Thin Trees			38.4132	68°	38.413268°	
пеш				-121.5259	29°	-121.525929°	
DWR ID	DWR_RD0150_03_s _ 2012_59						
Comment Code							

T5: Tree stumps.

Inspector Comment



A tree stump was found on the waterside of the levee looking upstream. Fall 2011

Location + Issue Type Ma : Maintenance Deficiancy N/A: Not Applicable LS: Land Side : Acceptable : Minimally Acceptable N : Not Inspected/Rated WS: Water Side C : Corrected Ob : Design & System Obsolescence U : Unacceptable A/W : Acceptable but Monitor & Maintain En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	9.31	Rating **	U	Issue No.	73		
LM End	9.35	Issue Type +	Ma	Location *	WS		
Category	Earthen Levee			GPS Latitude/Longitude			
Calegory				Start		End	
Item	Trim / Thin Trees			38.413095°		38.413169°	
item				-121.524402°		-121.523707°	
DWR ID	DWR_RD0150_03_s _ 2012_73						
Comment Code							

T3: Trim and thin trees to allow visibility of the ground and room to flood fight.

Inspector Comment



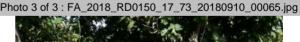


View of dense vegetation within levee easement. Fall 2018



View of fallen tree on levee slope. Fall 2018

LM Start	9.31	Rating **	U	Issue No.	73 (cont)
LM End	9.35	Issue Type +	Ma	Location *	WS





Thin/trim trees to allow for visibility of top 20' of waterward slope.

* Location Ma : Maintenance Deficiancy N/A: Not Applicable LS: Land Side : Acceptable : Minimally Acceptable N : Not Inspected/Rated WS: Water Side C : Corrected Ob : Design & System Obsolescence U : Unacceptable A/W : Acceptable but Monitor & Maintain En: Enforcement